A. 197

UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re:	Chapter 11
LEHMAN BROTHERS HOLDINGS, INC., *et al.*,	Case No. 08-13555
Debtors	(Jointly Administered)

EXPERT REPORT OF

JOHN P. GARVEY

MARCH 15, 2010

Table of Contents

List of Appendices

I. INTRODUCTION

1. This report is submitted by John P. Garvey. I am a Managing Director at Navigant Economics, a subsidiary of Navigant Consulting, Inc., a consulting firm that specializes in accounting, economic and financial analyses. I discuss my qualifications in more detail in Section II and present my curriculum vitae in Appendix I.

2. I have prepared this report at the request of Counsel for Movants to set forth the subject matters on which I expect to testify, the substance of the facts and opinions on which I expect to testify, and a summary of the foundations for each such opinion.[1, 2] In preparing this report, I have reviewed various documents related to this issue, as cited in the text and footnotes in this report and exhibits and/or Appendix II.

3. Navigant Economics (Chicago Partners) charges an hourly rate of $580 for my time. Other Navigant Economics (Chicago Partners) professionals, working under my direction and supervision, assisted in my analyses and Navigant Economics (Chicago Partners) was or will be compensated for their work at their customary hourly rates. This compensation is not contingent upon the substance of my testimony or the outcome of this matter.

4. The remainder of the report is organized as follows. Section III summarizes my opinions. Section IV provides the bases for my opinions.

---

[1] This report concerns three motions before the Court:

1) Motion of Official Committee of Unsecured Creditors of Lehman Brothers Holdings Inc. for Relief from Order Under 11 U.S.C. §§ 105(a), 363, and 365 and Federal Rules of Bankruptcy Procedure 2002, 6004 and 6006 Authorizing and Approving (A) Sale of Purchased Assets Free and Clear of Liens and Other Interests and (B) Assumption and Assignment of Executory Contracts and Unexpired Leases, Dated September 20, 2008 (and Related SIPA Sale Order) and Joinder in Debtors' and SIPA Trustee's Motions for an Order Under Rule 60(b) to Modify Sale Order, September 15, 2009;
2) The Trustee's Motion for Relief Pursuant to the Sale Orders or, Alternatively, for Certain Limited Relief Under Rule 60(b), September 15, 2009; and
3) Debtor's Motion for an Order Modifying the September 20, 2008 Sale Order and Granting Other Relief, September 15, 2009.

[2] If I receive additional data, facts, or information, I will review, evaluate, and analyze these additional data, facts, or information as they become available, including, but not limited to, the report(s) of experts in this matter. I may modify or supplement my report as necessary in response to any newly produced evidence or in rebuttal to any further opinions offered by Barclays' witnesses.

II. SUMMARY OF QUALIFICATIONS

5. My present position is Managing Director at Navigant Economics (Chicago Partners), a subsidiary of Navigant Consulting, Inc. Navigant Economics (Chicago Partners) specializes in consulting in the areas of accounting, economics, and finance. I am a CPA licensed in Illinois and my areas of expertise include accounting and auditing, finance and business valuation.

6. Prior to rejoining Chicago Partners in 2001, I was Market Team Leader for Business Fraud and Investigation Services at Arthur Andersen, specializing in forensic accounting, board-directed investigations and accounting irregularities. Prior to joining Chicago Partners initially, I was Vice President with Fort Dearborn Partners, Inc., specializing in business valuation, mergers and acquisitions, turnaround consulting, and litigation consulting. Prior to joining Fort Dearborn Partners, I was a Partner with Deloitte & Touche, where I spent fourteen years in the audit group.

III. SUMMARY OF OPINIONS

7. This section of my report summarizes my opinions. In the remaining sections of the report, I provide the substance of the facts and opinions on which I expect to testify, and the bases for each such opinion. If I receive additional data, facts or information, I will review, evaluate, and analyze these additional data, facts or information as they become available, including, but not limited to, the report(s) of experts in this matter. I may modify or supplement my report as necessary to reflect any additional information that I receive.

Opinion 1: Professor Pfleiderer's opinions regarding book value are flawed.[3]

[3] Professor Paul Pfleiderer was retained by Counsel for Barclays and submitted a report dated January 8, 2010 (the "Pfleiderer Report") "to analyze certain economic, financial, accounting, and valuation issues arising in this matter." Pfleiderer Report, ¶2.

Opinion 2: The Acquisition Balance Sheet is not representative of the values Barclays received in the acquisition and had a claim on as of September 19, 2008.

Opinion 2(a): The practice of marking securities from mid to bid is driven by fair value accounting rules and results in a conservative valuation of the securities.

Opinion 2(b): Barclays inconsistently and subjectively applied the methods used to mark securities from mid to bid in the Acquisition Balance Sheet.

Opinion 2(c): Barclays' use of valuation dates after September 22, 2008 is not supported by the accounting literature and results in understated values for certain securities in the Acquisition Balance Sheet.

Opinion 3: Professor Pfleiderer's evaluation and reliance on PriceWaterhouseCoopers' ("PwC") "extensive" testing of Barclays' exit price marks are flawed.

Opinion 4: Professor Pfleiderer is misguided in his analysis of the negative goodwill Barclays recorded.

IV. <u>OPINIONS AND BASES THEREOF</u>

8. This section discusses my opinions and the bases of my opinions.

Opinion 1: Professor Pfleiderer's Opinions Regarding Book Value are Flawed

9. Professor Pfleiderer's opinions regarding the definition of *book value* are flawed. Paragraph 82 in the Pfleiderer Report states: "[f]urthermore, to the best of my knowledge, 'book value' does not have a definite meaning in this context, such that a financial professional would understand it, as the Movants apparently do, to be synonymous with the 'marked' value of the assets and liabilities on Lehman's books as of any arbitrary date and without regard to the quality and timeliness of Lehman's marks on such date."

10. However, the term *book value* is not an obscure term as Professor Pfleiderer indicates. Financial professionals have many sources to gain an understanding of the term *book value*.[4] A generic search of web-based dictionaries and encyclopedias provides the following definitions of *book value*:

- The monetary amount by which an asset is valued in business records, a figure not necessarily identical to the amount the asset could bring on the open market.[5]
- [T]he value of a business, property, etc., as stated in a book of accounts (distinguished from market value).[6]
- The value at which an asset is carried on a balance sheet. . . .[7]
- In accounting, book value or carrying value is the value of an asset according to its balance sheet account balance. . . .[8]

11. In addition, the term *book value*, as commonly used in commerce and industry, does not contemplate any of the restrictions Professor Pfleiderer mentions in paragraph 82 of his report. As illustrated above, the term *book value* denotes the value of an asset (or a liability) recorded in the books at any point in time. The term *book value* makes no reference to the specific date an asset or a liability is recorded in the accounting records nor does the term *book value* embody the concept of timely review or update of the value of an asset or liability to ensure that the account reflects the latest information.

12. Professor Pfleiderer's assertions in paragraph 82 of his report are inconsistent with how the term *book value* is used in the Asset Purchase Agreement ("APA") to describe components of the Purchased Assets and Assumed Liabilities:

> "Purchased Assets" means all of the assets of Seller and its Subsidiaries used in connection with the Business (excluding the Excluded Assets), including;
>
> * * *

[4] *See* Appendix III.
[5] http://www.thefreedictionary.com/book+value, based on The American Heritage Dictionary of the English Language, 4th edition, last visited on March 10, 2010.
[6] http://dictionary.reference.com/browse/book+value, based on The Random House Dictionary, last visited on March 10, 2010.
[7] http://www.investopedia.com/terms/b/bookvalue.asp, last visited on March 10, 2010.
[8] http://en.wikipedia.org/wiki/Book_value, last visited on March 10, 2010.

> (d) government securities, commercial paper, corporate debt, corporate equity, exchange traded derivatives and collateralized short-term agreements with a book value as of the date hereof of approximately $70 billion.
>
> * * *
>
> On the terms and subject to the conditions set forth in this Agreement, at the Closing, Purchaser shall assume, effective as of the Closing, and shall timely perform and discharge in accordance with their respective terms, the following Liabilities of Seller and its Subsidiaries (collectively, the "Assumed Liabilities"):
>
> * * *
>
> (i) all short positions and "repos" relating to any securities or interests of the types included in the definition of "Long Positions" with a book value as of the date hereof of approximately $69 billion[9]

13. Moreover, the APA used the term *book value* interchangeably with the term *Lehman (LBI's) marks*.[10] The source of Lehman's marks is a central database system for pricing and other data called Lehman Global Funding System ("GFS").[11] GFS tracked financial assets at their fair value marks and updated these marks on a periodic basis. GFS gathered pricing data from the trading desks each evening; therefore, GFS contained the most recent information from the previous trading day.[12] Marks, however, were updated at various intervals, depending on the type of security, as explained by Steven Berkenfeld in his deposition:

> [N]ot all types of securities were marked every day. We did not mark our entire book of securities on a daily basis. We owned lots of level 3 securities, esoteric securities, and so we didn't go through a daily process of marking those. Some of those positions would be marked on a monthly or even a quarterly basis.[13]

---

[9] Asset Purchase Agreement, September 16, 2008, page 6, and pages 11-12.

[10] Section 3.3 of the APA, "Adjustment to Cash Amount", states: "Promptly following the first anniversary of the Closing Date, Purchaser shall determine with respect to each Position (long or short, including repos), that was part of the Purchased Assets and was sold on or prior to such first anniversary, the profit or loss realized from such sale (such profit or loss determined by reference to LBI's mark (book value) for such Position as of the date hereof)." (APA, Section 3.3).
However this provision was removed by the Sale Hearing on September 19, 2008, Lori Fife told the court: "There was an upside sharing in the original transaction. There was going to be a true-up twelve months later on and that has been eliminated from this transaction." (9/19/08 Hearing Tr. 47:7-10) Further, Paragraph 9 of the Clarification Letter removed this provision from the APA.

[11] "GFS" is Lehman's Global Funding System, "a global data warehouse that provides strategic and flexible reporting capabilities related to the Firm's financial resources." (BCI-EX-(S)-00213941 and BCI-EX-(S)-00213939) It is also sometimes referred to as Global Finance System, Global Financing System, or Global Financial System.

[12] Paolo Tonucci stated in his deposition: "Market data is received from other systems. GFS is just an aggregation tool, so would source data from settlement systems or from other pricing sources and apply that to the inventory positions or collateral positions. . . . It runs on an overnight basis so it should pick up all of the most current information." (Deposition of Paolo Tonucci, August 14, 2009, 95:5 – 96:3)

[13] Deposition of Steve Berkenfeld, August 6, 2009, 299:14-21.

14. Both Lehman and Barclays use the term *book value* in their respective annual reports and regulatory filings. In its Annual Report for the fiscal year ended December 31, 2008, Barclays PLC offered a table analyzing "the book value of securities which are carried at fair value."[14] In this table, Barclays PLC clearly distinguished "the book value of securities which are carried at fair value" from the "amortized cost" of the securities. Similarly, in its Form 10-K for the fiscal year ended December 31, 2007, Lehman Brothers Holdings Inc. stated: "Lehman Brothers Bank disposed of a leasing subsidiary, Dolphin Capital Corp., acquired in the acquisition of Capital Crossing. The transaction was an asset sale and amounts were transferred at approximately book value."[15]

15. In addition, Professor Pfleiderer contradicts himself regarding *book value* in his report. Professor Pfleiderer asserts that the term *book value* has no definite meaning, yet in Footnote 61 to his report, he quotes the APA to describe the "approximate valuation of the trading assets it [Barclays] would be acquiring" as having a "book value as of the date hereof or approximately $70 billion."[16] Further, Exhibit 8 to the Pfleiderer Report, uses "book value of target's net assets" as a basis for computing goodwill in seven bank acquisitions. The regulatory filings of financial institutions in Exhibit 8 define the meaning of *book value* as the amount at which an asset or a liability is reflected in accounting records.[17]

---

[14] Barclays PLC, Annual Report for the fiscal year ended Dec-31-2008 at 34, 26, 88.

[15] Lehman Brothers Holdings Inc., Annual Report (Form 10-K) for the fiscal year ended Nov-30-2007 at 46.

[16] Footnote 61, to ¶73, in the Pfleiderer Report states: "First, even though there was no reason do to so, Barclays allowed to be included in the Asset Purchase Agreement a description and **approximate valuation of the trading assets it would be acquiring**: 'government securities, commercial paper, corporate debt, corporate equities, exchange traded derivatives, and collateralized short term agreements **with a book value as of the date hereof of approximately $70 billion**." (emphasis added).

[17] "Book Value' means, with respect to any Asset and any Liability Assumed, the dollar amount thereof stated on the Accounting Records of the Failed Bank. The Book Value of any item shall be determined as of Bank Closing after adjustments made by the Receiver for differences in accounts, suspense items, unposted debits and credits, and other similar adjustments or corrections and for setoffs, whether voluntary or involuntary." (WestAmerica, (Form 8-K) (2/6/2009) at 2).
See also JP Morgan (Form 10-K) for the fiscal year ended Dec-31-2008 at 140: "The gain represents the amount by which the fair value of the net assets acquired (predominantly intangible assets and goodwill) exceeded JPMorgan Chase's book basis in the net assets transferred to First Data Corporation."
See also JP Morgan (Form 10-K) for the fiscal year ended Dec-31-2008 at 220: "Derivative guarantees also include contracts such as stable value derivatives that require the Firm to make a payment of the difference between the market value and the book value of a counterparty's reference portfolio of assets in the event that market value is less than book value and certain other conditions have been met." (JP Morgan, Form 10-K for the fiscal year ended Dec-31-2008, page 220).

Opinion 2: The Acquisition Balance Sheet is not Representative of the Values Barclays Received in the Acquisition and had a Claim on as of September 19, 2008.

16. This section highlights several flaws and inconsistencies in the valuation methods Barclays employed to determine the "exit price marks" included in the Acquisition Balance Sheet.[18] Professor Pfleiderer either ignores these flaws and inconsistencies in his analysis or accepts them without any analysis or consideration of the effects of such information in his opinions.

17. Barclays' Product Control Group ("PCG") was responsible for independently verifying the valuations developed by Barclays' business teams.[19] The record contains conflicting information regarding the valuation methods Barclays used to value the acquired assets on the Acquisition Balance Sheet. The securities acquired comprise of several components described below.

A. SCHEDULES A AND B

18. Not valuing the securities on Schedules A and B on the Closing Date of the Sale Transaction is incorrect. Schedules A and B contain lists of securities that were transferred to Barclays in September 2008. Schedule A contains securities that were part of the repurchase agreement collateral, and Schedule B contains assets in the "clearance boxes."[20] According to the Romain Declaration, the Schedule A securities were valued as of September 22, 2008.[21] The Romain Declaration is not clear regarding the valuation date for the Schedule B securities, but the underlying data indicate that the Schedule B securities were valued as of various dates discussed below.

19. In addition, the data used to develop the Acquisition Balance Sheet contradicts the Romain Declaration and indicates that not all Schedule A and B securities were valued as

[18] Barclays' opening balance sheet for its acquisition of Lehman Brothers North American businesses is contained in Barclays' 2008 Form 20-F and Annual Report (footnote 39(a) on page 235). In depositions, Exhibit 377A is commonly referred to as the opening balance sheet. The net assets acquired shown in Exhibit 377A match those in Barclays' 2008 Form 20-F. There are, however, some differences in several individual line items.
[19] Declaration of Gary Romain, January 26, 2010 ("Romain Declaration"), ¶5.
[20] Romain Declaration, ¶17 and ¶18.
[21] Romain Declaration, ¶18.

of September 22, 2008. A Barclays' spreadsheet with CUSIP-level price detail[22] that supports the Acquisition Balance Sheet indicates that Principal Mortgage Trading Group ("PMTG")[23] securities were valued using September 30, 2008 price data if the securities were still held at that date. PMTG securities that were sold between the Closing Date[24] and September 30 were valued at the sale price.

20. Barclays' rationale for using a September 30 valuation date appears to be based in part on or supported by a statement by Romain in an email dated December 11, 2008, in which he states: "we [Barclays] got control of /access to the assets on that day (possibly the day before)."[25]

---

[22] BCI-EX-00099519 - 108699.xls (a file in MS Excel native format).

[23] Declaration of Stephen King, January 27, 2010, ¶2.

[24] Documents in the record refer to September 19 (Friday at market closing), September 20 (Saturday – a non-trading day), September 21 (Sunday – a non-trading day) or September 22 (Monday –opening) as the Closing Date. For example, Romain states "[t]he measurement date is the acquisition date (Sunday 21 September – practically 19 September close)" at BCI-EX-00218500-501.
The facts are:

- The Sale Hearing occurred on September 19, 2008. (Hearing Transcript, September 19, 2008.)
- The Sale Order was approved in the early hours of September 20, 2008. (Hearing Transcript, September 19, 2008.)
- Paragraph 4.1 of the APA states: "Unless otherwise agreed by the parties in writing, the Closing shall be deemed effective and all right, title and interest of Seller to be acquired by Purchaser hereunder shall be considered to have passed to Purchaser as of 12:01 a.m. (New York time) on the Closing Date." (APA, ¶4.1.)

[25] BCI-EX-00218500-501. In the same e-mail (e-mail to Jon Holloway (of PwC) et. al. (including Patrick Clackson), titled, "Valuation of Securities," and dated Dec-11-2008, Romain continues:

> I believe that is also the argument just presented to Patrick [Clackson] as acceptable from your [PwC] perspective… [happy to view the balance as a receivable for the intervening 10 days if that helps, as per JP portfolio]
> The mid-prices that have been used to date are for 19 Sep. However, that's not too relevant – we could replace these prices with mid-prices for the 30th instead – the valuation adjustment necessary to get to 30th Sep bid would then be a different balancing number. However there is no point conducting that exercise since the net fair value number will be the same (i.e. 30th Sep bid).

In a subsequent e-mail (e-mail to Jon Holloway et. al. (including Clackson), dated Dec-14-2008 (also at BCI-EX-00218500), Romain enclosed the Dec-11-2008 e-mail cited above and added:

> The measurement date is the acquisition date (Sunday 21 September – practically 19 September close). However, our objective is to measure an appropriate bid level for the acquired securities. By bid we mean a genuinely attainable exit price for Barclays taking into account the way in which securities were acquired and the pattern of events in the days following the completion. In my mail below, by "control" I do not refer to legal ownership, which was established immediately upon completion of the acquisition, but rather practical control and the substantive ability to transact.
>
> * * *
>
> We believe this to be the most representative way we look at the transaction for valuation purposes. The opposing view is that we must use a market /model bid price on the date of legal ownership and the identified circumstances cannot be taken into account. I [Gary

21. The use of September 30, 2008 as the "measurement date" for certain securities is confirmed by a Barclays document entitled "Lehman Opening Balance Sheet – Barclays Capital Valuation Methodology"[26] ("Barclays' Valuation Memo"), which describes the use of different valuation dates for certain types of securities. According to Barclays' Valuation Memo, security types perceived as liquid (agency mortgages, corporate bonds, emerging markets, equities, and Treasuries/agencies) were valued using market data as of September 22, 2008. Exceptions to this rule include corporate bonds, which were valued using "min of available 3rd party data (much of it Trace)."[27]

22. A Barclays' valuation memo also describes the process for valuing securities perceived as illiquid (municipal bonds, and structured and securitized products of the PMTG).[28] Municipal bonds were valued as of September 19, 2008, net of an "imbedded haircut."[29] For PMTG assets sold between the Closing Date and September 30, 2008, the traded price was used to value the asset. For PMTG assets that were still on hand at September 30, 2008, "the PTMG desk was utilized with liquidity haircut applied to desk mark to bring it to a fair value under the extenuating market conditions."[30]

23. In his deposition, Professor Pfleiderer testified that the PMTG spreadsheet had many CUSIPs valued at sale price. He stated:

> And whenever Barclays in those cases had an initial mark as they oftentimes did, and then a sale transaction that occurred very shortly thereafter, they took the initial mark with the liquidity adjustment as the – as the value to be assigned for that particular CUSIP.[31]

24. Professor Pfleiderer opined further:

> And so it would be rather presumptuous for me to say that Barclays who is marking this at the actual sale that they realized is wrong and that there's a better

---

Romain] hope we can reach some common ground here [between Barclays and PwC] – happy to discuss further.

[26] BCI-EX-(S)-00213991-92.

[27] BCI-EX-(S)-00213991.

[28] BCI-EX-(S)-00213991.

[29] This may refer to a "liquidity haircut," as this asset class was described as "extremely illiquid at the time" in Barclays' Valuation Memo. See discussion of Barclays' use of the terms "haircut" and "liquidity haircut" below.

[30] BCI-EX-(S)-00213991.

[31] Deposition of Professor Paul Pfleiderer, February 23, 2010, 110:20-111:12.

indication of what value they could have realized than what they actually realized immediately after the transaction.[32]

25. Professor Pfleiderer fails to acknowledge that the majority of the purported sales Barclays "realized" were internal transfers from one Barclays' book of accounts to another Barclays' book of accounts. Specifically, Exhibit 533A distinguishes between $37.2 billion of assets transferred internally from the central book to a Barclays trading desk and $7.2 billion of assets that were sold externally to the market.[33]

26. In addition, Professor Pfleiderer fails to define what sale constitutes a sale occurring "immediately after the transaction" and what sale constitutes a sale occurring "very shortly after the transaction." He does not define how far out into the future a date ceases to meet his notion of "very shortly" or "immediately" after the September 30, 2008 transaction. Professor Pfleiderer's notions of "very shortly after" and "immediately after" are vague and unscientific. Moreover, any choice of a valuation date other than the Closing Date is incorrect and does not comply with relevant accounting principles. (See Section 2(c) below).

B. <u>ANNEX A</u>

27. Not valuing the securities on Annex A on the Closing Date of the Sale Transaction is incorrect. Annex A is a list of securities delivered to Barclays in December 2008 under the Settlement Agreement between JPMorgan Chase Bank, N.A. ("JPMorgan"), Barclays Capital Inc., and James W. Giddens, as Trustee in the Securities Investor Protection Act Liquidation of Lehman Brothers Inc. dated December 5, 2008 ("Settlement Agreement").[34] The Annex A securities were intended to be transferred to Barclays on the Closing Date as part of the Sale Transaction.[35] The securities were held by JPMorgan and were not transferred to Barclays on the Closing Date due to various operational issues.[36]

---

[32] Pfleiderer Dep., 110:7-16.
[33] Exhibit 533A (BCI-EX-00295932-33, at BCI-EX-00295932)
[34] Settlement Agreement from SIPA.
[35] Declaration of Shari D. Leventhal, Federal Reserve Bank of New York, ¶22.
[36] Leventhal Declaration, ¶14.

28. The Annex A securities were valued as of December 22, 2008, the date of receipt by Barclays.[37] Barclays' accounting/valuation rationale for using this valuation date appears to relate to a theory posited by Romain that they did not have "practical control and the substantive ability to transact".[38] An email from Romain to Barclays' independent auditors, PwC, dated October 24, 2008, written in anticipation of delivery of the Annex A securities, states:

> Re the securities that JPM are (finally…) going to deliver to us – we need to value these on the date we receive them. To go back to 19/9 would be inappropriate since we had no control over these securities between close date and delivery date. The negotiation with JPM was over what value of cash/securities they were going to deliver to us – that value is determined by reference to the valuation on delivery date.[39]

29. The documents and analyses supporting the Acquisition Balance Sheet also indicate that Annex A assets were valued as of December 22, 2008.[40] Professor Pfleiderer concurred with Barclays' choice of December 22, 2008 (and not the Closing Date) as the measurement date for Annex A:

> [I]t was appropriate to judge, or value, I should say – again as an upper bound – the repo capital that was received as of December as of a December and not as of a September date. So because of the complexity of what actually occurred, there is not a single date involved here.[41]

30. Barclays' choice of a valuation date other than the Closing Date is incorrect and does not comply with relevant accounting principles. (See Section 2(c) below).

C. <u>VALUATION ADJUSTMENTS AND "HAIRCUTS"</u>

31. Barclays used the terms "haircut," "liquidity haircut," and "liquidity discount" in its valuation analyses to describe different types of adjustments Barclays made to the value of securities included in the Acquisition Balance Sheet. Barclays vested these terms with multiple meanings and the related Barclays adjustments include various components as described below.

[37] Romain Declaration, ¶19.
[38] BCI-EX-00218500-501.
[39] BCI-EX-(S)-00110050.
[40] BCI-EX-00108700.xls.
[41] Pfleiderer Dep., 131:8-16.

32. The values in the Schedule A and Schedule B spreadsheets (Exhibit 86A and 641A) and the Annex A spreadsheets (Exhibit 87B and 641A), which support the amounts in the Acquisition Balance Sheet, contain a "market value w/ liquidity" table which is used to adjust the values reported in the Acquisition Balance Sheet.[42] The "market value w/ liquidity" table is often net of various adjustments in addition to the typical "haircut" applied to repo collateral. For example, the "market value w/ liquidity" table typically reflects a bid-offer adjustment (described below), but may also reflect an adjustment designed to result in an exit price mark as of a subsequent valuation date. Below I discuss how Barclays used different valuation adjustments and related terminology to systematically understate the value of securities included in the Acquisition Balance Sheet.

Opinion 2(a): The Practice of Marking Securities from Mid to Bid is Driven by Fair Value Accounting Rules and Results in a Conservative Valuation of the Securities.

33. Barclays intended to record the securities acquired from Lehman at "exit price marks".

34. Gary Romain, Head of Technical Accounting and Private Equity Finance for Barclays Capital, stated Barclays' objective was "to measure an appropriate bid level for the acquired securities."[43] Patrick Clackson, Chief Financial Officer of Barclays Capital, further described Barclays' rationale for why positions were valued at bid level "under IFRS accounting rules":

> All trading positions, where you have a long position you value it at the bid and short position you value at the offer price. The specific accounting rules around acquisitions are you have to fair value all the assets and liabilities when you acquire, when you do the acquisition, and in terms of fair valuing financial instruments you have to value long at bid and short at offer.[44]

35. International accounting standards (i.e. IAS 39, ¶AG70) use the terms *bid-price*, *asking price*, and *current-offer price* but do not reference the term *exit price*. Fair value

[42] Deposition Exhibits 86B (BCI-EX-00099519-521), 87B (BCI-EX-00108700), and 641A (BCI-EX-(S)-00213990-993).
[43] BCI-EX-00218500-1.
[44] Deposition of Patrick Clackson, September 4, 2009, 142:16-24.

accounting rules under U.S. GAAP allow the practice of marking from mid to bid in an effort to approximate an "exit price."[45] The practice of marking from mid to bid yields a conservative measure of fair value. Such conservative measures of fair value recorded by Barclays on the Acquisition Balance Sheet serve to understate the value of Barclays' Windfall rather than overstate the value of Barclays' Windfall as Professor Pfleiderer states in his report.

36. Professor Pfleiderer incorrectly opined that:

> Because the applicable accounting standards do not permit recognition of some economically important factors such as the sheer size (and consequent illiquidity) of the positions, which in this case would have made the "fair value" of many positions difficult or impossible to realize in an actual sale, these **"fair values" likely overstate the actual economic value of the acquired trading assets** and should be viewed as stating an upper bound on the range of actual economic value.[46]

37. Professor Pfleiderer further stated:

> Importantly, there are additional factors that may be relevant to understanding the economics of the Transaction that are not reflected in exit/bid prices developed by Barclays. These are not "fire sale" prices, nor are these "bulk" prices that take into account either the size of individual positions or the overall size of the transaction. (As I mentioned before, it is my understanding that applicable accounting rules do not allow these factors to be taken into account for purposes of developing "fair value" estimates of asset values of the type set forth in Barclays' acquisition accounting statement.) These factors, had they been taken into account, would have led to lower marks and to a lower assessment of the value of the trading assets acquired by Barclays. Importantly, these considerations would be relevant to an economic assessment of what Barclays received. Thus, the "fair value" valuation of the securities and assets Barclays received from Lehman in the Fed Replacement Repo at Barclays exit price marks is an upper bound on the reasonably estimated value of those assets.[47]

38. Professor Pfleiderer's opinions appear to ignore the relevant accounting rules, such as IFRS 39 ¶48A, which explicitly states: "The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It

---

[45] SFAS 157 *Fair Value Measurements*, ¶7. For similar references to exit price see SFAS 157 Summary and SFAS 157 ¶16, 17, 30, A2, A8, A27, C13, C16, C21, C23, C26, C29, C52, C63, C84.
[46] Pfleiderer Report, Footnote 40 (emphasis added).
[47] Pfleiderer Report, ¶59.

incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments."[48]

39. Fair value measurement methods do not stipulate that exit price marks establish the upper bound on the economic values. To the contrary, relevant accounting principles require the preparer to incorporate all factors that market participants would consider when measuring the exit price marks.

40. In addition to the understatement to the Barclays Windfall caused by the fair value methods used in the Acquisition Balance Sheet, Barclays' inconsistent and subjective use of its methods intended to establish exit price marks further understates the value of Barclays' Windfall.

Opinion 2(b): Barclays Inconsistently and Subjectively Applied the Methods Used to Mark Securities from Mid to Bid in the Acquisition Balance Sheet.

41. This opinion describes various inconsistencies and flaws in the methods Barclays employed in measuring the securities included in the Acquisition Balance Sheet. In addition, I alert the court that Professor Pfleiderer either ignores these flaws and inconsistencies in his analysis or accepts them without any analysis or consideration of the effects of such information on his opinions.

42. In some cases, Barclays computed exit price marks by adjusting the mid-value (the midpoint between bid and ask prices) by what it called a "bid-offer adjustment," which was computed as half of the spread between the bid and ask prices. Subtracting the bid-offer adjustment from the mid-value results in a hypothetical price Barclays would receive if it sold the asset. Patrick Clackson described how Barclays determined bid prices in the Acquisition Balance Sheet:

> So for some things you would be able to see bid offer quotes on things for those markets at that point in time, and where those are available those are what we used. For more illiquid markets you would have to try and look at trades or trades near that date to try and work out what the right bid price for those assets were.

[48] IAS 39, ¶48A (emphasis added.) (cited in Appendix III of this report).

> As I said, it was a lot of work done, which is partly why it took a lot of time to complete the acquisition balance sheet.[49]

A. GENERAL INCONSISTENCIES AND SUBJECTIVITY IN BARCLAYS' MID TO BID ADJUSTMENTS IN THE ACQUISITION BALANCE SHEET.

43. This section documents how Barclays deviated without any explanation, reason or support from its own alleged mid to bid adjustment policy and procedure.

44. In an e-mail to PwC, Mark Washtell of Barclays claims: "The methodology is consistent with the firms [*sic*] provisioning policy statement which states we can apply bid-offer [discount] at portfolio level rather than instrument by instrument."[50] In the same e-mail Mr. Washtell admits Barclays' subjective application of the purportedly compliant method: "**Most of what we do is subjective to some degree**, this is not the only example, and **we regularly use our experience to recommend the most appropriate approach in such circumstances**, this is no different."[51]

45. Similarly, Mr. Clackson described the process for updating the asset valuations once the assets were recorded:

> We do different things for different portfolios. So for some portfolios we revalue them daily at midmarket, and then we have a bid offer adjustment across the whole portfolio. For other portfolios we may value individual positions on bid and offer. More normally I think for the bigger portfolios we have a bid offer adjustment across the portfolio and we use a similar mechanism to work out what that should be.[52]

46. Exhibits 86B, 87B and 641A (which support the Acquisition Balance Sheet amounts for Schedules A and B, and for Annex A, respectively) each include a tab called "liquidity" which contains a table of "haircuts" for various asset classes. These tables represent Barclays' purported bid-offer adjustments for each asset class and security type. However, Barclays did not apply the liquidity haircuts uniformly to each asset class.[53]

---

[49] Deposition of Patrick Clackson, September 4, 2009, 144:17 – 145:2.
[50] BCI-EX-00248365-79, at BCI-EX-00248368 (underline in the original).
[51] BCI-EX-00248365-79, at BCI-EX-00248368 (emphasis added).
[52] Clackson Dep., 145:11-19.
[53] *See* Clackson's testimony related to Barclays' determination of bid prices in the Acquisition Balance Sheet. (Clackson Dep., 145:11-19). A review of Exhibits 86B and 87B confirms Clackson's statement and Barclays' inconsistent valuation adjustments within asset classes. For example, regardless of asset class, Barclays applied no liquidity discount to Annex A securities with unit price lower than $10.00. (*See* if-

47. In several instances the "market value w/ liquidity" table comingles the liquidity discount on a position with a price adjustment Barclays arbitrarily applied by choosing a valuation date other than September 19 or September 22, 2008.[54] Professor Pfleiderer's testimony is relevant:

> And whenever Barclays in those cases had an initial mark as they oftentimes did, and then a sale transaction that occurred very shortly thereafter, they took the sale transaction rather than the initial mark with the liquidity adjustment as the -- as the value to be assigned for that particular CUSIP. [55]

B. BARCLAYS INCONSISTENTLY AND SUBJECTIVELY APPLIED THE METHODS USED TO MARK LEHMAN'S EQUITY POSITIONS FROM MID TO BID IN THE ACQUISITION BALANCE SHEET.

48. In an email to PwC dated December 12, 2008, Barclays described a purported 1.32% bid-mid spread adjustment to Lehman's equity positions:

> The values that we receive for the Equity prices are based on last traded. For simplicity we have assumed that these are mids and so we need to make an adjustment to move these to the bid side of the market. A more conservative assumption would be that the prices are offers (which is [*sic*] a rapidly falling market is probably more realistic) which would obviously lead to a larger adjustment.
> Based on an analysis of the securities we were able to obtain bid/offer spreads for about 2100 of the 3700 securities which had an average bid/offer of 2.64%. This again would be a conservative estimate as the securities with a quoted bid offer would most likely be the most liquid and hence trading at the tightest spreads. The mid to bid spread would then be 1.32% leading to a mid-bid adjustment of $132 mm or an offer to bid adjustment of $264mm.[56]

49. In practice, Barclays applied arbitrary bid-offer adjustments. Specifically, Barclays applied a 4.32% (and not the 1.32%) bid-offer adjustment to the value of equities.[57] This 4.32% bid-offer adjustment Barclays applied is incorrectly computed.

---

statement formula in column W, tab "Portfolio 3" in the native file format of Exhibit 87B (BCI-EX-00108700.xls).

[54] My Opinion 2(c) (below) addresses Barclays' non-compliant and arbitrary choice of alternative valuation dates.

[55] Deposition of Professor Paul Pfleiderer, February 23, 2010, 111:3-12. (emphasis added)

[56] BCI-EX-00218502-503, at BCI-EX-00218503.

[57] This was derived by computing the spread as of December 18, 2008 and deriving the implied spread as of September 22, 2008. The implied spread was based on the change in spread over that time frame for securities for which spread data was available on both dates (0922 Equities Bid-Offer (BCI-EX-00255172).xls).

C. BARCLAYS INCONSISTENTLY AND SUBJECTIVELY APPLIED THE METHODS USED TO MARK THE EXCHANGE TRADED OPTIONS (ETO) PORTFOLIO FROM MID TO BID IN THE ACQUISITION BALANCE SHEET.

50. Barclays intended to apply the following method to adjust the valuation of exchange traded options ("ETO"):

> In principle, we [Barclays] value long positions at bid and value short positions at ask. In practice, we [Barclays] value a position in the following formula:
>
> Net Valuation = mid-value + bid-value
> = position*(bid+ask)/2*100 – abs[position*(ask-bid)/2*100]
>
> where position is positive (negative) if long (short, resp.).
>
> Please note that the formula exactly reflects the principle. The advantage of this formula provides us a way to better estimate the bid-mid value in order to minimize the data noise in the market.[58]

51. In practice, Barclays employed multiple valuation methods to ETOs leading to exceptions and inconsistencies when calculating the mid-to-bid adjustments in the Acquisition Balance Sheet. Specifically:

- For positions with no independent pricing data, Barclays used the ADP prices[59] as ask and generated a bid based on the formula:[60]

  Bid = Max [ask*(1-95%), $6]

  Barclays' choice of ADP prices as a proxy for ask prices is unsupported. The record is unclear whether the ADP prices were *bid*, *ask* or *daily closing* prices and how frequently the ADP prices were updated. In addition, Barclay's choice of $6 as a parameter in the formula is subjective and unsupported.

- When applying its net valuation adjustment for ETOs, Barclays used different dates for the bid-mid value and mid-value inputs for the same computation. Specifically, Barclays used mid-value ($509 million) as of end-of-day ("EOD") on September 22, 2008 and bid-mid value ($531 million) as of EOD on September 19, 2008 in the same net valuation.[61] Regardless of whether September 19th or September 22nd is the proper measurement date, if Barclays

[58] BCI-EX-(S)-00110233-38, at BCI-EX-(S)-00110237.
[59] I understand that Automatic Data Processing, Inc. (ADP) served as pricing-data repository for Barclays.
[60] BCI-EX-(S)-00110233-38, at BCI-EX-(S)-00110237.
[61] BCI-EX-(S)-00110233-38, at BCI-EX-(S)-00110237-38.

performed the same net valuation and used both the mid-value ($509 million) and the bid-mid value ($352 million)[62] as of EOD on September 22, 2008, the net valuation of Barclays exchange traded option portfolio would have been $861 million rather than $1,040 billion. This inconsistency again understates Barclays Windfall.

D. BARCLAYS INCONSISTENTLY AND SUBJECTIVELY APPLIED THE METHODS USED TO MARK ITS AGENCY CMO PORTFOLIO FROM MID TO BID IN THE ACQUISITION BALANCE SHEET.

52. Barclays' PCG applied a ten percent bid-offer discount to Agency Collateralized Mortgage Obligations ("Agency CMO") "to appropriately measure the market uncertainty and potential valuation adjustments resulting from more observable data."[63] PCG rationalized the ten percent discount to PwC (i) by comparing differences in observable pricing indicators from "various sources" at the bond level, and (ii) by analyzing a trade sample of 39 agency bonds that had a buy and a sell on the same day.[64]

53. The PCG rationalization for the ten percent discount on Agency CMOs is subjective and unsupported. PCG incorrectly used an intra-day trading range (i.e. the spread between "a buy and a sell on the same day")[65] as a proxy for bid-ask spread, which is measured using trading prices as of the exact same instant in time. Using intraday trading ranges instead of bid-ask spreads introduces bias in PCG's measure of the bid-offer discount for Agency CMOs.

54. PCG incorrectly applied the same 10% liquidity discount to the whole Agency CMO portfolio. A review of the limited sample of 39 CUSIPs that Barclays used proves that the Agency CMOs have significantly different risk profiles and daily trading patterns. One half of the sample had intraday trading ranges of 15.92% to 23.93%. The second half of the sample had intraday trading ranges of 0.03% to 1.48%.[66] Barclays had no basis in applying the same 10% across the whole Agency CMO portfolio, without further investigating the risk characteristics and the trading profiles of the Agency CMO securities.

[62] BCI-EX-(S)-00110233-38, at BCI-EX-(S)-00110238.
[63] BCI-EX-00248415-58, at BCI-EX-00248415.
[64] BCI-EX-00248415-58, at BCI-EX-00248415.
[65] BCI-EX-00248415-58, at BCI-EX-00248415.
[66] BCI-EX-00248415-58, at BCI-EX-00248416 (see column "B/O %").

E. PROFESSOR PFLEIDERER EITHER IGNORES THE INCONSISTENCIES AND SUBJECTIVITY IN BARCLAYS' MID TO BID ADJUSTMENTS IN THE ACQUISITION BALANCE SHEET IN HIS ANALYSIS OR ACCEPTS THESE FLAWS AND INCONSISTENCIES WITHOUT ANY ANALYSIS OR CONSIDERATION OF THE EFFECTS OF SUCH INFORMATION ON HIS OPINIONS.

55. In his report Professor Pfleiderer stated:

> Adjustments of mid-point marks to bid-quote levels was intended to assure that the valuations used in Barclays' financial statements were computed at "exit prices" that reflected what Barclays likely would receive in an orderly sale of the assets in question, as I understand is required by applicable accounting standards.[67]

56. Professor Pfleiderer further stated:

> Barclays typically reduced mid-point prices for ALT-A mortgage backed securities by 10% or 15% to adjust them to exit prices, with the size of the adjustment varying across different types of ALT-A products. [68]

57. At his deposition, Professor Pfleiderer acknowledged the exceptions, inconsistencies and subjectivity Barclays applied when making the mid to bid adjustments:

> It was not the case that the haircut was uniformly applied to securities based upon type. And one example where that's not true are [*sic*] the corporate securities, ones that are labeled "corporate".
>
> * * *
>
> [N]o liquidity discount is being taken off of that on the spreadsheets that are related to liquidity discounts. Rather what is done is keying off of the minimum of the various quotations that were obtained.
> So what that means, of course, is that within the class of corporate securities, it is not the case that a uniform treatment is being applied in terms of a percentage reduction because it's based upon actual quotations that are coming from the market.
>
> * * *
>
> [A]nd there were asset classes where it was generally the case that a haircut, liquidity haircut is what I believed they called it at time, was applied generally across CUSIPs. But there were exceptions to that. So I would have to go back and look to see if there were any asset classes for which all of the CUSIPs within that class -- and that would include the initial inventory and the J.P. Morgan

[67] Pfleiderer Report, ¶51(9).
[68] Pfleiderer Report, Footnote 100.

inventory. It was uniform across all of those because there were some exceptions.[69]

58. Professor Pfleiderer failed to analyze the impact of the incorrect and subjective mid to bid adjustments Barclays made.

Opinion 2(c): Barclays' Use of Valuation Dates after September 22, 2008 is not Supported by the Accounting Literature and Results in Understated Values for Certain Securities in the Acquisition Balance Sheet.

59. This opinion describes the flaws in the valuation date methods employed by Barclays in the Acquisition Balance Sheet and how Professor Pfleiderer accepted the flaws and inconsistencies with no discussion or analysis in his report.

A. THERE IS NO SUPPORT IN IAS OR U.S. GAAP.

60. IAS and U.S. GAAP instruct the acquirer to use the acquisition date as the measurement date when accounting for assets acquired in a business combination.[70] Gary Romain was fully aware of this reporting requirement: "[t]he measurement date is the acquisition date (Sunday 21 September – practically 19 September close)".[71] Yet, in the same email, Romain develops and applies his alternative theories of "practical control" and "substantive ability to transact," both of which are not referenced anywhere in US GAAP or IFRS.[72]

61. Barclays' use of alternate valuation dates other than the acquisition or measurement date (September 19, 2008) is unsupported and results in a lower valuation of assets in the Acquisition Balance Sheet and serves to increase Barclays' Windfall.

62. Paradoxically, Barclays applied judgment in choosing several different measurement dates to value the assets acquired, yet as of September 19, 2008, Barclays recognized the obligation for and began servicing liabilities related to the financial assets Barclays acquired from Lehman. For example, in a letter to the Commodity Futures

[69] Pfleiderer Dep., 27:5 – 29:23.
[70] IFRS 3, ¶24 (cited in Appendix III).
[71] BCI-EX-00218500-501.
[72] BCI-EX-00218500-501.

Trading Commission dated September 19, 2008, Archibald Cox, Chairman of Barclays Americas stated:

> [B]arclays will be responsible for any variation margin or other payment obligations due to derivatives clearing organizations on Monday, September 22, 2008, arising from positions in futures or options on futures carried in the accounts of LBI customers that are transferred to Barclays pursuant to the Agreement[73]

63. Similarly, the Transfer and Assumption Agreement between Barclays and the Options Clearing Corporation ("OCC") indicates that Barclays assumed the obligations related to the margin accounts at the OCC as of the acquisition date.[74]

B. THE VALUATION DATES CHOSEN BY BARCLAYS ARE INCONSISTENT AND UNSUPPORTED.

64. Barclays chose inconsistently and selectively and without regard to the accounting rules the dates on which to value certain securities. The dates chosen and the rationale used to support the decision are not well developed and lead to an understatement of Barclays' Windfall. Such subjectivity in Barclays' choice of measurement dates introduces managerial bias. It is unclear when in the minds of Barclays' management a subsequent sale loses its probative value with respect to the Acquisition Balance Sheet – is it 10 days, 30 days, 90 days, 180 days, or 365 days. Taken to an extreme, Barclays' choice of subsequent valuation dates could have extended to measurement dates as far as twelve months after the acquisition date which is not the spirit of the business combination accounting standards.

65. The Giants Stadium Bonds illustrate the effects of the arbitrary nature of Barclays' choice of valuation dates. Professor Pfleiderer describes the bonds issued by The New York Giants in Item 6 on Appendix Four to his report: "[a]ccording to Barclays' position detail spreadsheets, Barclays valued the Giants auction rate securities it acquired, for accounting purposes, at their indicated values using BoNY's marks (which ranged from about $10 per $100 of face value to about $44 per $100 of face value), without further downward adjustment."[75] Subsequently, on various dates from

---

[73] BCI-EX-00258394.
[74] Exhibit 51.
[75] Pfleiderer Report, Appendix Four, Item 6, *Giants Stadium Bonds*, page 112.

April 28 through May 19, 2009, Barclays sold the Giants Stadium Bond positions and realized a cumulative gain of at least US$349,329,865.[76] Barclays chose not to use the subsequent sales price in this case to value the Giants Stadium Bonds in the Acquisition Balance Sheet but to use the lower BoNY mark to value the bonds in the Acquisition Balance Sheet.[77]

C. THE OPINIONS OFFERED BY PROFESSOR PFLEIDERER REGARDING THE USE OF SUBSEQUENT MEASUREMENT DATES ARE FLAWED.

66. Professor Pfleiderer appears to understand how subsequent events and market movements affect the fair value of an asset. Discussing his hypothetical example at paragraph 66 of his report, Professor Pfleiderer correctly concludes that the $200,000 price a classic automobile attains in an auction "says little or nothing" about "whether the buyer in the original transaction paid fair value for the car six months ago."[78]

67. However, Professor Pfleiderer fails to consider the effects of subsequent events or market movements on the trading portfolio assets Barclays acquired from Lehman from the acquisition date to the subsequent date of sale. For example, when discussing how Barclays recorded the "125 different CMOs" with "aggregate indicated value of $237.7 million" (at BoNY marks), Professor Pfleiderer states: "Because these positions were sold off quickly, Barclays did not finalize September 22 exit price marks for these positions, but **instead valued them for financial accounting purposes at their actual sales value**."[79] Professor Pfleiderer accepts Barclays' choice of valuation date without any analysis or discussion of the accounting rules. He does not examine how the subsequent sale prices for the collateralized Alt-A securities differ from their respective fair values as of the acquisition date.

68. Similarly, in his deposition testimony Professor Pfleiderer acknowledged Barclays' choice of alternative valuation dates for PMTG assets as follows:

[76] BCI-EX-00297320 (a native format document produced by Defendants in support of Exhibit 533-A).
[77] BCI-EX-00297320 (a native format document produced by Defendants in support of Exhibit 533-A) and BCI-EX-00295932-33 (Dep. Ex. 533A), (showing a reduction of the four Giants Stadium Bonds held by Dec-31-2008 of $102,000,000 and a gain of $349,329,865). The actual transactions between Sep-19-2008 and Dec-31-2008 that resulted in these gains were not produced in discovery.
[78] Pfleiderer Report, ¶66.
[79] Pfleiderer Report, Appendix Four, Item 1, *Collateralized ALT-A mortgage obligations issued by Structured Adjustable Rate Mortgage Loan Trust*, at 107.

> [W]henever Barclays in those cases had an initial mark as they oftentimes did, and then a sale transaction that occurred very shortly thereafter, they took the sale transaction rather than the initial mark with the liquidity adjustment as the value to be assigned for that particular CUSIP. And if we open up that spreadsheet, I can show you numerous examples.[80]

69. Moreover, Professor Pfleiderer appears to ignore the fact that many of the sale prices were realized from internal transfers that may not represent arms-length transactions. In fact, many of the alleged "subsequent sales" represent internal transfer prices among Barclays' related trading entities at prices influenced by Barclays' management. Such internal transfer prices warrant additional testing and verification before serving as proxies for fair value.

70. Professor Pfleiderer also repeatedly stated in his report and deposition that he is not a Certified Public Accountant ("CPA") and that he was not qualified to interpret accounting rules. Yet in his deposition, Professor Pfleiderer indicated that the use of the subsequent sale price as a proxy for an exit price in the Acquisition Balance Sheet was correct.[81] Professor Pfleiderer's statements in his deposition are logically inconsistent with the assertions in his report. In addition, Professor Pfleiderer provides insufficient foundation and insufficient evidence to support his testimony. Professor Pfleiderer admits that he is not a CPA and not qualified to interpret the rules while at the same time he opines that the methods and judgments made by Barclays are correct from a financial accounting perspective.

Opinion 3: Professor Pfleiderer's Evaluation and Reliance on PwC's "Extensive" Testing of Barclays' Exit Price Marks are Flawed.

71. This section analyzes the flaws in Professor Pfleiderer's reliance on the "extensive investigation and testing of Barclays exit price marks by PwC." As highlighted below, Professor Pfleiderer's assumptions and assertions regarding PwC's procedures lack foundation and appear to be predicated on an incomplete analysis and insufficient understanding of the facts.

---

[80] Pfleiderer Dep., 111:3-12.
[81] Pfleiderer Dep., 89:13-90:17, 110:7-113:23, 131:3-133:9

A. PROFESSOR PFLEIDERER DID NOT EVALUATE PWC'S TESTING PROCEDURES.

72. In Paragraph 51(12) to his report, Professor Pfleiderer concludes that "PriceWaterhouseCoopers conducted an extensive audit of Barclays' final summary of the Acquisition, which included extensive investigation and testing of Barclays exit price marks." Similarly, in his deposition Professor Pfleiderer includes several references describing his reliance on the PwC reviews.[82]

73. In his report, Professor Pfleiderer does not provide the basis for his opinion regarding the extensiveness and reliability of PwC audit procedures. He does not provide any evaluation of the procedures PwC performed and does not assess nor identify which PwC procedures meet his definition of "extensive audit." In addition, in his deposition, Professor Pfleiderer admitted that his understanding of the "thorough review" PwC performed of Barclays' procedures is based on hearsay or perhaps on a telephonic conversation.[83]

B. PROFESSOR PFLEIDERER'S RELIANCE ON PWC'S "EXTENSIVE" TESTING OF BARCLAYS' EXIT PRICE MARKS IS UNSUPPORTED.

74. Professor Pfleiderer does not provide any analysis of his understanding of the professional responsibilities of PwC regarding its audit of Barclays' Acquisition Balance Sheet. He does not analyze the audit assertions PwC is making in its engagement for Barclays nor does he provide any analysis or explanation for many of the misstatements and aggressive judgments utilized by Barclays in the Acquisition Balance Sheet.

75. Professor Pfleiderer's opinion regarding the "extensive investigation and testing of Barclays exit price marks by PwC" is not supported by a review of the procedures documented in the PwC work papers and made available to Professor Pfleiderer at the time he included this opinion in his Pfleiderer Report.

76. Appendix V presents an overview of the audit process. Appendix VI summarizes the relevant standards and guidance auditors should consider when auditing fair value measurements and disclosures.

---

[82] Pfleiderer Dep., 253:25-254:8, 260:3-10, 322:5-11.
[83] Pfleiderer Dep., 260:11-24.

C. REVIEW OF THE PWC WORKPAPERS PROFESSOR PFLEIDERER RELIED UPON.

77. Counsel for Defendant Barclays identified that Professor Pfleiderer relied on data and documents in BCI-EX-00247453 – BCI-EX-00295654 to arrive at his conclusion regarding the "extensive audit" PwC performed.[84]

78. I reviewed the PwC production Professor Pfleiderer relied upon (BCI-EX-00247453 – BCI-EX-00295654) and noted that PwC performed extremely limited tests of Barclays exit price marks recorded on Barclays Acquisition Balance Sheet.[85] PwC testing of Barclays' exit price marks, as documented in BCI-EX-00247453 – BCI-EX-00295654, was limited to:

- Collecting emails that documented Barclays' procedures;
- Collecting from PCG price changes of JPM securities from December 22 to December 30, 2008;
- Checking for arithmetic accuracy;
- Annotating a draft acquisition balance sheet;[86]
- Confirming par values (and not fair values) for small samples of securities or positions;[87]
- Verifying with Bloomberg the imputed interest on a small-sample (15 out of 8,839 positions) of acquired securities;

---

[84] Letter from Jonathan W. Davenport, dated February 6, 2010, ¶3(k). The range BCI-EX-00247453 – BCI-EX-00295654, specified in Davenport's letter, corresponds to data and documents produced on two disks (Disk 9 and 10) as part of a larger production by Defendants in January 2010.

[85] PwC workpapers document other testing procedures not related to testing the valuation of the financial assets acquired. Some of these unrelated procedures, PwC performed include:

- Cash balance and bank reconciliations,
- E&Y workpapers testing the cash-flow based valuations of real estate,
- PwC testing of fixed assets and E&Y schedules of Fixed Asset contributory charges,
- PwC cash reconciliation, E&Y assembled workforce workpapers and PwC bonus testing,
- Customer relationship valuation tests,
- Testing internal controls and account balances over PIM and 15c3 customer accounts,
- Testing system capabilities, data transfers and functionality for Lehman's legacy information technology systems, and
- Testing of FTD (failed-to-deliver) and FTR (failed-to-receive) trade exceptions

[86] BCI-EX-00248592

[87] BCI-EX-00249452.xls (*PwC Testing-Additional Securities* produced in native file format).

- Testing the 12/31/2008 prices of 886 CUSIPS of additional unencumbered assets: equities, corporate bonds, municipal bonds and one CMO (DLJ Mortgage Acceptance);[88] and
- Testing a sample at 12/31/2008 (40 out of 161) PL1 Municipals America GQE positions – PwC tested price versus S&P, FTID, MSRB, SCPG, GFS.[89]

79. All of the tests above used Bloomberg and S&P as pricing benchmarks. I was not able to find any independent valuation model or logarithm that PwC used to test Barclays' exit price marks.

80. The documents Professor Pfleiderer alleges he reviewed while preparing his report do not seem to support his conclusion that PwC undertook an "extensive investigation and testing of Barclays' exit price marks". Professor Pfleiderer's assertions in his report are flawed and lack sufficient foundation as illustrated by his understanding of audit work undertaken by PwC and his conclusion regarding PwC's "extensive investigation and testing of Barclays exit price marks".

D. REVIEW OF THE PWC WORKPAPERS PRODUCED AFTER PROFESSOR PFLEIDERER FILED HIS REPORT

81. On February 12, 2010, PwC produced additional documents, hereafter referenced as "the February 12, 2010 PwC production."[90]

82. While PwC performed certain procedures, it is not clear whether an extensive investigation and testing was performed. "An extensive investigation and testing of Barclays exit price marks" includes

- Examination of evidence regarding the existence of a right on an asset;

[88] BCI-EX-00255181.xls (*New LBI Firm Asset List A 12312008 FINAL* produced in native file format).
[89] BCI-EX-00258590.xls (*Lehman Cash Muni Price Testing 20081231 PwC* produced in native file format)
[90] *See* Letter from Martine M. Beamon (Davis Polk & Wardwell LLP) to William J. Hine, dated February 12, 2010, describing the PwC production to include documents bearing production numbers PwC-BarCapWP 000000001 – 00128004. The documents produced in the February 12, 2010 production "include (1) documents from the section of the electronic PwC LLP audit workpaper database related to the work performed in connection with the Lehman acquisition, (2) external workpaper documents corresponding to those electronic workpapers, and (3) emails collected from seven custodians for the time period between September 12, 2008 and March 31, 2009." Footnote one to this letter lists the seven custodians: Michael Guarnuccio, Paul Lameo, Robert MacGoey, Jalen Tan, Eric McGuinn, Lissette Palacios and Norbert Porlein.

- Inspection of the facilities, such as the Giants Stadium or architectural drawings, building site thereto;
- Documentation of the reasonableness of management assumptions and models used for deriving Barclays measures of fair value and independent assessments of the fair values Barclays derived;
- Selection and testing of a sample of appropriate size and characteristics from the eleven thousand securities Barclays acquired from Lehman (evaluate additional sampling requirements for Level II and Level III securities which represent greater audit risks);
- Analysis of the contractual documents for each security valued to understand its characteristics such as: (1) structure of the security and it tranches, (2) the priority of cashflow distributions, (3) the events triggering default of additional margin requirements;
- Construction of cash flow scenarios and alternative scenarios based on varying market inputs (e.g. prepayment rates, default rates, mortality rates; interest rates and expected interest rate; political risk for government bonds).

83. Based on my review of the PwC procedures performed on Barclays' exit price marks (as documented in the February 12, 2010 PwC production), PwC most likely did not perform an extensive investigation and testing in light of the following deficiencies in the valuations included in Barclays' Acquisition Balance Sheet:

- Pine CLO:
  - Without reviewing the underlying deal documents and without testing or investigation, PwC accepted Barclays' incorrect valuation of the Pine CLO. In deriving its valuation, Barclays failed to recognize the inverted structure of the CLO and its own senior position within that structure. This means that Barclays itself failed to recognized that in the Pine structure, Barclays' senior Class A-1 position was fully funded and not responsible for any additional cash contributions that could arise from additional funding requests from the underlying borrowers.

- Barclays incorrectly assumed a 70% probability that Barclays, as the holder of the Class A-1 tranche, would be obligated to fund the entire amount of the remaining balance available to be drawn upon by the underlying borrowers. Barclays also failed to recognize, as provided in the deal documents, that Lehman, a bankrupt entity, would be responsible for providing any additional funding. Barclays incorrectly assigned a "ZERO" probability to the most likely outcome that the Pine Trustee or the Lehman Bankruptcy Trustee or both, post Lehman bankruptcy, would prevent the funding of any additional advances due to the Lehman bankruptcy.

- Barclays, as the holder of the class A-1 tranche, would have first claim on the assets of the CLO, which according to Barclays, included $367 million of cash investments and $697 million of funded loans. Barclays valued this cash and loans totaling $1,064 million at $428.6 million (or at a price of 40.3 cents on the dollar). Had Barclays properly recognized the structure of Pine, and left all of Barclays' other valuation assumptions, probabilities and scenarios the same, Barclays' valuation would have been significantly higher.[91]

- Barclays' PCG applied a ten percent bid-offer discount to Agency Collateralized Mortgage Obligations ("Agency CMO") "to appropriately measure the market uncertainty and potential valuation adjustments resulting from more observable data."[92] PCG rationalized the ten percent discount to PwC (i) by comparing differences in observable pricing indicators from "various sources" at the bond level, and (ii) by analyzing a trade sample of 39 agency bonds that had a buy and a sell on the same day.[93] The PCG rationalization for the ten percent discount on Agency CMOs is subjective and supported by an incomplete analysis. Certain buy and sell quotations for the select securities appear to be from different periods of the day and not from

[91] Expert Report of Mark E. Slattery, CFA filed in this litigation on March 15, 2010, at 22.
[92] BCI-EX-00248415-418
[93] BCI-EX-00248415-418

the same trading instant. Such buy and sell quotations serve to approximate the intraday trading range for a security and not the bid-ask spread.

- Barclays applied a five percent "liquidity discount" to notes that were maturing within days of the acquisition date or exhibited risk profiles inconsistent with Barclays discounting. Such unwarranted liquidity discounts resulted in exorbitant yields on specific Barclays' discount notes. For example, CUSIP RTD019828 resulted in an implied yield of 643.4% on a $50 million bond three days prior to the bond's maturity. Similarly, CUSIP RTD019885 resulted in an implied yield of 276.8% seven days prior to its maturity. Cumulatively, the yield analysis of the discount notes resulted in approximately $140 million understatement of Barclays Acquisition Balance Sheet.[94]

- Barclays relied on aggressive and unsupported concepts of control by using Romain's theories of "practical control" and "substantive ability to transact" as a premise to support subsequent valuation dates for the securities Barclays acquired from Lehman. The valuations resulting from the subsequent valuation dates serve to understate Barclays Windfall.

- Barclays PCG used proxies (Lehman CDS) for an actively traded instrument (Lehman commercial paper) with recorded prices (on the TRACE system).[95] Specifically, on September 22, 2008, Barclays PCG remarked $2.2 million of Lehman commercial paper "positions at 9.5%, using Lehman CDS as a proxy for senior unsecured recoveries." Lehman senior unsecured bonds were actively trading with recorded prices on the TRACE database. The TRACE database was developed by FINRA and dealer adherence to timely reporting is regulated by the SEC. Barclays PCG approach to approximate Lehman bond prices with Lehman CDS was unwarranted and allowed Barclays PCG to apply managerial judgment and introduce bias in valuing an instrument with an observable price.

[94] Expert Report of Mark E. Slattery, CFA filed in this litigation on March 15, 2010, Table 4 "Yield Analysis of Discount Notes".
[95] PwC-BarCapWP_00022935-48, at PwC-BarCapWP_00022943.

- Barclays asserted that "Utilizing vendor pricing including BONY, Bloomberg or other sources provides a reasonable basis for the Company's estimation of fair value." [96] The record indicates that Barclays inconsistently and subjectively applied this pricing procedure in estimating fair value. For example, Barclays recorded CUSIP 656533AA4 and CUSIP 458204AD6 in the Acquisition Balance Sheet at prices different from the BoNY marks. Specifically, Barclays recorded CUSIP 656533AA4 (with nominal principal value of $62,346,775 and BoNY mark of $55,319,670) in the Acquisition Balance Sheet at $49,715,318.[97] Similarly, Barclays recorded CUSIP 458204AD6 (with nominal principal value of $15,000,000 and BoNY mark of $12,825,000) in the Acquisition Balance Sheet at zero.[98] These are just two examples of securities that were recorded in the Acquisition Balance Sheet using procedures that deviated from Barclays' stated policy.

- Barclays PCG appears to have made an aggressive valuation of the Giants Stadium Bonds in the Acquisition Balance Sheet. [99] PwC wrote: "Utilizing vendor pricing including BONY, Bloomberg or other sources provides a reasonable basis for the Company's estimation of fair value." Barclays PCG subjectively chose to use BONY prices for the Giants Stadium bonds despite e-mails, attached to the Summary indicating that Barclays substantially moved the price marks in October – one month following the transfer of the bonds to Barclays. Further, in its price testing, PwC seems to indicate a non-investment grade rating for Giants Stadium LLC resulting in a deeply discounted price. For example, the memo[100] states that the monoline insurance provider for the securities transferred to Barclays is rated CC (i.e. non-investment grade) but Moody's provided an independent "stand-alone" rating of Baa3 to these Giants Stadium LLC bonds on September 17, 2008 and no longer rated the series of notes held by Barclays at the non-investment grade rating of the

[96] PwC-BarCapWP_00022935-48, at PwC-BarCapWP_00022943.
[97] BCI-EX-00099519.xls – produced in native file format, see tab [Corps], row 326.
[98] BCI-EX-00099519.xls – produced in native file format, see tab [Corps], row 202.
[99] PwC-BarCapWP_00022935-48, at PwC-BarCapWP_00022943.
[100] PwC-BarCapWP_00022935-48, memo "Giants Stadium – Description of Movem" embedded at PwC-BarCapWP_00022943.

monoline insurer. It is hard to understand how PwC accepted the deeply discounted price and the non-investment grade rating in light of all the information available at the time the Giants Stadium valuation was made.

- PwC accepted without further investigation Barclays' inconsistent accounting treatment of assets with similar economic characteristics. PwC agreed with Barclays' incorrect recoding of a redeemed bond at par while at the same time recording a matured bond at zero or no value. Specifically, PwC agreed that Barclays reasonably priced a bond CUSIP 74256AA1 – that was called (i.e. redeemed by the issuer) – at Par or full principal value.[101] Yet, PwC also agreed that Barclays reasonably price three investment-grade bonds[102] and four high-yield bonds[103] that matured at zero or no value. The economic impact to the holder of the bond is the same in both cases (redemption by issuer or maturity) in that the holder received prior to 12/22/2008 all of the principal and interest due from the investment.

- PwC concluded, with respect to a high-yield bond that "The fifth position, CUSIP 8265Q0YD8, is in default, therefore, a price of zero does not appear unreasonable."[104] In general, however, a bond that has defaults still has a recovery value and should be valued to reflect such recovery value. Yet, PwC accepted the price of zero without performing additional tests of the potential recovery value of CUSIP 8265Q0YD8.

Opinion 4: Professor Pfleiderer is Misguided in His Analysis of the Negative Goodwill Barclays Recorded.

84. Professor Pfleiderer's analysis of Barclays reported negative goodwill "of approximately $2 billion, post tax"[105] is misguided and flawed for several reasons.

85. Professor Pfleiderer argues that there is only $0.5 billion of the negative goodwill(gain) on financial assets and this calculation results in "very close to a

---

[101] PwC-BarCapWP_00023570-76, at PwC-BarCapWP_00023575.
[102] PwC-BarCapWP_00023570-76, at PwC-BarCapWP_00023575.
[103] PwC-BarCapWP_00023570-76, at PwC-BarCapWP_00023576.
[104] PwC-BarCapWP_00023570-76, at PwC-BarCapWP_00023576.
[105] Pfleiderer Report, ¶5(c).

mathematical wash"[106] when excluding any gains associated with the exchange and non-financial assets. That is, Professor Pfleiderer contends that the repo transaction was a wash as consummated. This analysis is misguided for several reasons.

86. The accounting model for business combinations looks at the transaction in total when valuing assets and liabilities acquired [107] Pfleiderer's arbitrary exclusion of gains on non-financial assets is flawed and not a proper determination of negative goodwill in this transaction.

87. In addition, Professor Pfleiderer contradicts his own calculation in his report when he states: "It is an important fact that Barclays did not acquire the Repo Collateral in a separate, standalone transaction, but instead acquired these assets as part of a larger bundle of assets and liabilities associated with LBI's North American broker-dealer businesses. This means, first, that there was no separate identifiable 'price' paid by Barclays for the trading portfolio securities and, second and more specifically, that the $45 billion that Barclays lent to LBI in the Fed Replacement Repo should not be viewed as the 'price' Barclays paid for the Repo Collateral."[108]

88. Second, Professor Pfleiderer concludes that it is appropriate to exclude the $2.1 billion gain on positions at exchanges from his negative goodwill analysis because Barclays "neither knew *nor could have known or even roughly estimated* the net value of these accounts at the time of the Sale Hearing."[109] This determination again is misguided. Barclays' inability to assess the value of an asset at the precise moment of the Sale Transaction has no bearing in either U.S. GAAP or IFRS[110] nor does it comport with the fact that Barclays determined and reported in their financial statements that they recognized a $2.1 billion pre-tax gain on these same assets. The accounting rules contemplate that this type of risk, perceived or otherwise, could arise and directs the financial statement preparer to assess both the value of the collateral and the value of the associated liabilities rather than ignore the value of the assets and liabilities. The

---

[106] Pfleiderer Report, ¶116.
[107] IFRS 3, ¶IN7(c) (cited in Appendix III of this report).
[108] Pfleiderer Report, ¶10.
[109] Pfleiderer Report, ¶117 (emphasis as shown).
[110] IFRS 3, ¶44.

associated risk is one more item that must be evaluated in making a determination of the fair value of the assets and liabilities acquired in a business combination.[111]

89. Finally, Professor Pfleiderer also attempts to exclude the negative goodwill (gain) associated with other categories of assets acquired, including intangibles in his attempt to demonstrate that the sale as consummated was a wash.[112] Excluding the real property[113] Barclays acquired additional assets of approximately $2.08 billion comprised primarily of intangibles, furniture and other assets.[114] Intangibles included the use of Lehman's name for two years, customer lists, relationships, and a variety of other assets.[115] However, total consideration for all these non-financial assets was $250 million. This results in a negative goodwill (gain) of $1.83 billion ($2.08 - $0.25). This calculation is improper because these assets, like the other enumerated assets, were contemplated in the APA and representations made to the Court. They should not be considered separately when determining the amount of negative goodwill associated with the Sale transaction.[116] In any event, and as demonstrated in Professor Zmijewski's Report, Barclays' negative goodwill on the transaction as consummated was far greater – Barclays' Windfall was at least $13.051 billion.[117]

Submitted by:

John P. Garvey

John P. Garvey
March 15, 2010

[111] IAS 39, ¶48A.
[112] Pfleiderer Report, ¶116.
[113] Each of the three buildings Barclays acquired from Lehman was valued by at least one independent appraiser. Specifically, CB Richard Ellis ("CBRE", PwC-BarCapWP_00042693-808) and Cushman & Wakefield (PwC-BarCapWP_00042671-692) independent of each other appraised the *745 Seventh Avenue* building. Barclays recorded that property at the average of the two valuations (PwC-BarCapWP_00042499-502). CBRE independently appraised the value of the *40 Corporate (Piscataway)* property (PwC-BarCapWP_00042583-670) and the *27 Commerce (Cranford)* property (PwC-BarCapWP_00042504-82). Barclays recorded these properties at their appraised values in the Acquisition Balance Sheet (PwC-BarCapWP_00042499-502).
[114] Exhibit 377A.
[115] Report by Ernst & Young LLP, dated January 30, 2009, titled "Valuation advisory services related to the acquisition of certain assets of Lehman Brothers Holdings, Inc." (BCI-EX-00292153 – 2237).
[116] IFRS 3, ¶51 and ¶52.
[117] Expert Report of Mark E. Zmijewski, Ph. D. filed in this litigation on March 15, 2010, at 9.

Appendix I

Curriculum Vitae

JOHN P. GARVEY

Principal
Chicago Partners (A Subsidiary of Navigant Consulting)
30 South Wacker Drive, Suite 3100
Chicago, Illinois 60606
Telephone: (312) 251-4571
Facsimile: (312) 251-5201

CURRENT EMPLOYMENT

CHICAGO PARTNERS (A Subsidiary of Navigant Consulting)

Principal, (Present; 1996 – 1999)

EDUCATION

M.B.A. (Finance), The University of Chicago, 1988

B.B. (Accounting), Western Illinois University, 1978

Certified Public Accountant, Licensed in Illinois

PROFESSIONAL EXPERIENCE

CHICAGO PARTNERS (A Subsidiary of Navigant Consulting)

John Garvey, *Principal*, is a CPA. He is the former President of Chicago Partners and currently serves as the Segment Leader of the Economics Practice of Navigant Consulting, Inc. He has testified or directed complex litigation matters regarding fraud and forensic accounting, securities fraud, accounting irregularities, merger and acquisition disputes, derivative disputes, professional liability, bankruptcy and solvency, business valuation and general damages issues. Mr. Garvey has represented numerous companies and individuals before regulatory bodies including the Securities and Exchange Commission and the CFTC. Mr. Garvey has also assisted counsel in many high profile board directed investigations of allegations of fraud and accounting irregularities. He has appeared as an expert in Delaware Chancery Court, Bankruptcy Court, State and Federal courts and in various administrative forums. Mr. Garvey has also served as an independent arbitrator.

PROFESSIONAL EXPERIENCE (con't.)

ARTHUR ANDERSEN LLP

Partner and Market Team Leader for Business Fraud and Investigation Services, (1999-2001)

Assisted in house or special counsel in conducting internal corporate investigations into alleged fraud and/or illegal acts perpetrated by employees and/or officers of publicly held and privately owned enterprises.

Assisted outside counsel in the investigation of liability and damages issues in numerous large class action Federal securities suits and the defense of several "Big Five" accounting firms regarding the interpretation and application of GAAP, GAAS and public disclosure issues.

Assisted special counsel to the audit committees of the board of directors of numerous Fortune 500 companies in the investigation and resolution of alleged accounting irregularities.

Have participated in over 30 board directed investigations into alleged accounting irregularities.

Represented various companies in front of regulatory bodies including the Securities and Exchange Commission and the Commodity Futures Trading Commission.

Represented both buyers and sellers in post-acquisition disputes regarding the analysis of and interpretation of contractual and GAAP issues and related valuation questions. Served as an independent arbitrator for several post-acquisition disputes.

FORT DEARBORN PARTNERS, INC.

Vice President, (June, 1994 - December, 1995)

Vice President in a financial and management consulting firm specializing in mergers and acquisitions and related financing transactions.

Represented buyers and sellers of middle market companies in mergers and acquisitions and financing transactions.

PROFESSIONAL EXPERIENCE (con't.)

Provided business valuation, merger and acquisition analysis and general damage analysis consulting in litigation matters related to fraud, securities, mergers and acquisitions, professional liability, business valuation and general damages issues.

DELOITTE & TOUCHE

Partner, (1980 - June, 1994)

Partner with fourteen years of general audit and consulting experience servicing a variety of publicly and privately held companies, with an emphasis in manufacturing and distribution and financial services. Clients served included Beatrice Companies, Borg-Warner Corporation, the Chicago Board of Trade, Hollister, Inc., ICM Industries, Inc., the Keebler Company and Navistar International Corporation.

Other specialized experience included:

Special Acquisition Services

Supervised numerous due diligence engagements in a broad spectrum of transactions, including leveraged buyouts, acquisitions, dispositions, mergers, joint ventures, refinancings and restructurings. Engagements ranged in size from several of the largest leveraged buyouts to transactions in the $50 to $100 million ranges. Financial buyers served included KKR, The Blackstone Group, Merrill Lynch Capital Partners and ICM Industries, Inc.

Participated in several financial and operational restructurings for a Fortune 100 Company providing technical consulting in the areas of recapitalizations and debt restructurings, disposition strategies, strategic cost management and financial and regulatory reporting.

Litigation Services

Provided financial and damage analyses to attorneys in connection with lawsuits related to patent infringement, fraud and misappropriation of assets, accounting malpractice and negligence, mergers and acquisition disputes, securities fraud, breach of contract, lost profits, business valuation, market analysis, and other matters in the commodities and securities industries, professional service industry, retailing and manufacturing and distribution industries. Also provided consulting

PROFESSIONAL EXPERIENCE (con't.)

assistance to attorneys on technical accounting, auditing and corporate finance issues. Personally directed or involved in approximately 20 cases. Served as Arbitrator in binding arbitration.

Member of Deloitte & Touche National Litigation Steering Committee.

PROFESSIONAL AFFILIATIONS

Association of Certified Fraud Examiners
American Institute of Certified Public Accountants
Illinois CPA Society
Boys & Girls Clubs of Chicago - Corporate Board Member

SELECTED LITIGATION ENGAGEMENTS

Securities and Exchange Commission v. Delphi Corp., et al. United States District Court – Eastern District of Michigan. Securities Fraud. Testified on behalf of plaintiff at deposition.

Delphi Corporation v. Appaloosa Management L.P., et. al. United States Bankruptcy Court – Southern District of New York. Breach of Contract. Testified on behalf of defendants at deposition.

Dr. Anthony Cerami v. Novartis Vaccines and Diagnostics, Inc. United States District Court – Southern District of New York. Breach of Contract. Testified on behalf of defendant at deposition.

Banco Espirito Santo International, Ltd., ESB Finance, Ltd. and Banco Espirito Santo S.A. v. BDO Seidman, LLP and BDO International B.V. Circuit Court – Miami Dade County, Florida. Professional Negligence/Malpractice. Testified on behalf of defendants at deposition and trial.

Appleton Papers Inc. v. Andritz BMB AG. Circuit Court - State of Wisconsin. Breach of Contract and Fraud. Testified on behalf of plaintiff at deposition.

United States of America v. Gregory L. Reyes. United States District Court – Northern District of California – San Francisco Division. Securities Fraud. Testified on behalf of plaintiff at trial.

Marsulex, Inc., Claimant v. Trelleborg Corporation, et al., Respondents. AAA Arbitration. Fraud and breach of contract. Testified on behalf of Claimant at deposition and arbitration.

SELECTED LITIGATION ENGAGEMENTS (con't.)

In re Parmalat Securities Litigation. MDL 1653. United States District Court - Southern District of New York. Securities Fraud. Testified on behalf of defendant, Grant Thornton International, at deposition.

Parmalat Capital Finance Limited v. Grant Thornton International, et al. Circuit Court of Cook County Illinois - Law Division. Securities Fraud. Testified on behalf of defendant at deposition.

Securities and Exchange Commission v. Gregory L. Reyes, et al. United States District Court – Northern District of California. Securities Fraud. Testified on behalf of plaintiff at deposition.

Securities and Exchange Commission v. Jeffrey P. Jorissen, Gary A. Shipman and Mary A. Perella. United States District Court – Eastern District of Michigan. Testified on behalf of defendant, Jeffrey P. Jorissen at deposition.

American Farm Bureau, Inc. Claimant v. IBFA Acquisition Company, LLC; Respondent. AAA Arbitration – Central Case Management Center. Fraud and breach of contract. Testified on behalf of Claimant at deposition.

Panolam Industries International, Inc. and Pioneer Plastics Corporation v. Neste Resins Corporation, Neste Resins Canada and Dynea U.S.A., Inc. United States District Court - District of Connecticut. Breach of contract. Testified on behalf of defendants at deposition.

Joseph White v. Heartland High-Yield Municipal Bond Fund, et al. United States District Court - Eastern District of Wisconsin. Testified on behalf of defendant, PricewaterhouseCoopers at deposition.

The State of Oregon, By and Through the Oregon Public Employees Retirement Board v. McKesson HBOC, Inc. , et al. Superior Court of California. Securities fraud. Testified on behalf of defendants at deposition.

SERVED AS INDEPENDENT ARBITRATOR IN SEVERAL POST ACQUISTION CONTRACT AND BREACH OF CONTRACT DISPUTES

BOARD AND REGULATORY (SEC) INVESTIGATIONS

Waste Management, Inc.
Sunbeam Corporation
Kmart Corporation
OfficeMax, Inc.
Hanover Compressor
Flowserve Corporation

BOARD AND REGULATORY (SEC) INVESTIGATIONS (con't.)

Dana Corporation
General Mills

Appendix II

Documents Relied Upon

Documents in the Record

Depositions

Deponent	Date
Steven Berkenfeld	8/6/2009
Paolo Tonucci	8/14/2009
Bart McDade	9/2/2009
John Varley	9/3/2009
Patrick Clackson	9/4/2009
Stephen King	9/10/2009
Gary Romain	9/10/2009
John Varley	9/11/2009
Gary Romain	1/13/2010
Paul Pfleiderer	2/23/2010
James Seery	3/3/2010

Deposition Exhibits

Exhibit	Beginning Bates	Ending Bates
1 - Asset Purchase Agreement		
24 - First Amendment to the Asset Purchase Agreement		
25 - Clarification Letter		
51- Transfer and Assumption Agreement, dated Sept. 22, 2008		
86B - Summary of the numbers for Schedules A and B provided to auditors	BCI-EX 00099519	BCI-EX 00099521
87B - JPM Inventory, Annex A Assets	BCI-EX-00108700	
88B - Barclays' Acquisition Balance Sheet	BCI-EX-00109154	BCI-EX-00109161
205 - Settlement Agreement between JPM, Barclays and Giddens, dated Dec. 5, 2008		
377A - Barclays' Opening Balance Sheet	BCI-EX-00115843	BCI-EX-00115846
444- Declaration of Shari D. Leventhal, in Support of Trustee's Motion For Entry of an Order Approving a Settlement Agreement		
495 - Debtor's Motion for an Order, Pursuant to Fed. R. Civ. P. 60 and Fed. R. Bankr. P. 9024, Modifying the September 20, 2008 Sale Order and Granting Other Relief, Sept. 15, 2009		
533A - Lehman Acquisition Assets Summary	BCI-EX-00295932	BCI-EX-00295933
591 - Report of Peter Vinella, dated Jan. 1, 2010		
600 - Report of Anthony Saunders, dated Jan. 1, 2010		
633A - Expert Report of Prof. Paul Pfleiderer, Volume 1		
634A - Expert Report of Prof. Paul Pfleiderer, Volume 2		
641A - Email from Sean Teague to Tal Litvin, et al., Feb. 12, 2009, re: "Acquisition Balance Sheet," (with attachments).	BCI-EX-(S)-00213990	BCI-EX-(S)-00213996
652 - Report of Anthony J. Leitner, dated Jan. 1, 2010		

BCI Opposition Brief Exhibits

146 - Romain's Handwritten Notes	
147 - Romain's Typed Notes	
357 - Declaration of Romain, dated Jan. 26, 2010	
363 - Declaration of Stephen King, dated Jan. 27, 2010	

Other Documents

Description	Beginning Bates	Ending Bates
Summary of the numbers for Schedules A and B provided to auditors (native file)	BCI-EX 00099519	
Email from Romain to PwC, dated Oct. 24, 2008, Re: JPM securities	BCI-EX-(S)-00110050	
Email chain between PwC and Barclays, dated Feb. 1, 2009, Re: Opening BS Valuation Work	BCI-EX-(S)-00110233	BCI-EX-(S)-00110238
Balance Sheet Close – Inventory, ITS Close Narrative	BCI-EX-(S)-00213939	BCI-EX-(S)-00213940
Balance Sheet Close – Inventory, MTS Close Narrative	BCI-EX-(S)-00213941	BCI-EX-(S)-00213945
Barclays Capital Valuation Methodology	BCI-EX-(S)-00213991	BCI-EX-(S)-00213992
Email from Romain to Clackson, et. al., dated Dec. 14, 2008, Re: Valuation of securities	BCI-EX-00218500	BCI-EX-00218501
Email from Morton to Holloway, dated Dec. 12, 2008	BCI-EX-00218502	BCI-EX-00218503
Email from Romain, dated Jan. 27, 2009, Opening Balance Sheet attached	BCI-EX-00247453	BCI-EX-00247454
Email chain between Mark Washtell and PwC, dated Oct. 20, 2008 - Jan. 13, 2009, Re: Bid offer calculation	BCI-EX-00248365	BCI-EX-00248379
Memorandum dated February 2, 2009 from Richard Landreman to PwC, subject "RMBS Portfolio Acquired from Lehman - Bid/Offer Reserve Agency CMOs"	BCI-EX-00248415	BCI-EX-00248418
Long Island - Gross Acquisition Balance Sheet (draft) with Romain's notes	BCI-EX-00248592	
PwC Testing-Additional Securities	BCI-EX-00249452	

	Equity Bid-Offer Calculation, dated Sept. 22, 2008	BCI-EX-00255172	
	New LBI Firm Asset List A 12312008 FINAL	BCI-EX-00255181	
	Letter from Ananda K. Radhakrishnan, dated Sept. 19, 2008	BCI-EX-00258394	
	Lehman Cash Muni Price Testing 20081231 PwC.xls	BCI-EX-00258590	
	Barclays Lehman Report and Exhibits	BCI-EX-00292153	BCI-EX-00292237
	Sched B LehOBS 5	BCI-EX-00295934	
	Support for Exhibit 533-A (produced in native format)	BCI-EX-00297320	
	Bloomberg screen shots, Giants Stadium Bonds	BCI-EX-00297526	BCI-EX-00297541
	Barclays Capital NA - FMV of Investments Testing	PwC-BarCapWP_00021945	PwC-BarCapWP_00021952
	Final- BarCap - Lehman Acquisition Memo Revised 2/08/09 Draft	PwC-BarCapWP_00022935	PwC-BarCapWP_00022948
	Review of JPM Acquisition Valuation (12/22/08) for CDOs and Corporate Bonds	PwC-BarCapWP_00023570	PwC-BarCapWP_00023576
	Barclays JPM Draft Memo v13	PwC-BarCapWP_00023595	PwC-BarCapWP_00023604
	Summary Meeting_Unencumbered Assets	PwC-BarCapWP_00027533	
	Valuation of Buildings	PwC-BarCapWP_00042499	PwC-BarCapWP_00042502
	CBRE - 27 Commerce (Cranford) Appraisal	PwC-BarCapWP_00042504	PwC-BarCapWP_00042582
	CBRE - 40 Corporate (Piscataway) Appraisal	PwC-BarCapWP_00042583	PwC-BarCapWP_00042670
	745 Seventh Avenue Appraisal	PwC-BarCapWP_00042671	PwC-BarCapWP_00042692
	745 Seventh Ave - CBRE Appraisal	PwC-BarCapWP_00042693	PwC-BarCapWP_00042808
	BCI Rule 60 Opposition and Undelivered Assets Brief, dated Jan. 29, 2010		
	Debtors' Adversary Complaint, dated Nov. 16, 2009		
	Expert Report of Harrison J. Goldin, dated Mar. 15, 2010		
	Expert Report of John J. Schneider, dated Mar. 15, 2010		
	Expert Report of John Olvany, dated Mar. 15, 2010		
	Expert Report of Joseph Schwaba, dated Mar. 15, 2010		
	Expert Report of Mark E. Slattery, dated Mar. 15, 2010		
	Expert Report of Mark E. Zmijewski, dated Mar. 15, 2010		
	Hearing Transcript, dated Sept. 19, 2008		
	Hearing Transcript, dated Dec. 22, 2008		
	Letter from Davenport to Carrero, dated Feb. 6, 2010		
	Letter from Jonathan W. Davenport, dated Feb. 6, 2010		
	Letter from Martine M. Beamon (Davis Polk & Wardwell LLP; counsel for PwC) to William J. Hine, dated Feb. 12, 2010		
	Motion of Official Committee of Unsecured Creditors of Lehman Brothers Holdings Inc., et al., Pursuant to 11 U.S.C. § 105(a), Fed. R. Civ. P. 60(b), and Fed. R. Bankr. P. 9024, for Relief from Order Under 11 U.S.C. §§ 105(a), 363, and 365 and Federal Rules of Bankruptcy Procedure 2002, 6004 and 6006, dated Sept. 15, 2009		
	Official Committee of Unsecured Creditors' Adversary Complaint, dated Nov. 16, 2009		
	Report of Anton R. Valukas, Examiner in re Lehman Brothers Holdings, Inc. et al, Chapter 11 Case No. 08-13555 (JMP), Volume 7, Appendix 3, Key Individuals		
	The Trustee's Adversary Complaint, Nov. 16, 2009		
	The Trustee's Motion for Relief Pursuant to the Sale Orders or, Alternatively, for Certain Limited Relief Under Rule 60(b), Sept. 15, 2009		
Documents that are Publicly Available			
	Accounting Terminology Bulletin 3 *Book Value*		
	AU Section 328 *Auditing Fair Value Measurements and Disclosures*		
	Barclays Annual Report, year ended Dec. 31, 2008		
	Barclays PLC, Form 20-F, year ended Dec. 31, 2008		
	David N. Ricchiute, *Auditing* , 8th edition (United States: Thomson / South-Western, 2006 (ISBN: 0-324-22629-2))		
	http://dictionary.reference.com/browse/book+value		
	http://en.wikipedia.org/wiki/Book_value		
	http://www.fasb.org/intl/convergence_iasb.shtml		
	http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176154526495&pf=true		
	http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176154526571&pf=true		
	http://www.iasb.org/The+organisation/IASCF+and+IASB.htm		
	http://www.investopedia.com/terms/b/bookvalue.asp		
	http://www.thefreedictionary.com/book+value		
	IAS 39 *Financial Instruments Recognition and Measurement*		
	IASB *Information for Observers* (IASB Board Meeting, London, Dec. 12, 2007)		
	IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*		
	IFRS 3 *Business Combinations*		
	JP Morgan, Form 10-K, year ended Dec. 31, 2008		
	Lehman Brothers Holdings Inc., Form 10-K, year ended Nov. 30, 2007		
	SEC Regulation S-K, *Non Financial Statement Requirements*		
	SEC Regulation S-X, *Financial Statement Requirements*		
	SFAS 157 *Fair Value Measurements*		
	WestAmerica Bancorporation, Form 8-K, filed Feb. 6, 2009		

Appendix III

Summary of Relevant Accounting Principles

1. This Appendix presents a summary of relevant accounting principles.

2. The management of Barclays PLC and Barclays Bank PLC is responsible for "the preparation of financial statements for external reporting purposes in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and the International Accounting Standards Board (IASB)."[118]

3. This assertion is stated clearly in the financial statements (Annual Report and Form 20-F) issued by Barclays for the fiscal year ended December 31, 2008.[119]

4. Lehman Brothers Holdings Inc. and its subsidiaries prepared their financial statements in accordance with U.S. generally accepted accounting principles ("U.S. GAAP").[120] U.S. GAAP and IFRS standards are developed using similar processes.[121] "In October 2002, the FASB and the International Accounting Standards Board (IASB) announced the issuance of a memorandum of understanding ("Norwalk Agreement"), marking a significant step toward formalizing their commitment to the convergence of U.S. and international accounting standards."[122] When discussing relevant generally accepted accounting principles, I focus on IFRS (the standards governing Barclays's external financial reporting), and highlight commonalities and differences between IFRS and U.S. GAAP.

---

[118] Barclays PLC and Barclays Bank PLC Form 20-F for the fiscal year ended December 31, 2008, page 173. *Identical disclosure in* Barclays PLC Annual Report 2008, page 187.
See also Barclays PLC and Barclays Bank PLC Form 20-F for the fiscal year ended December 31, 2008, page 176. *Identical disclosure in* Barclays PLC Annual Report 2008, page 190.

[119] Barclays PLC and Barclays Bank PLC Form 20-F for the fiscal year ended December 31, 2008, page 173. *Identical disclosure in* Barclays PLC Annual Report 2008, page 187.
See also Barclays PLC and Barclays Bank PLC Form 20-F for the fiscal year ended December 31, 2008, page 176. *Identical disclosure in* Barclays PLC Annual Report 2008, page 190.

[120] Lehman Brothers Holding, Inc., Form 10-K for the fiscal year ended November 30, 2007, page 84.

[121] http://www.iasb.org/The+organisation/IASCF+and+IASB.htm, last visited March 10, 2010, http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176154526571&pf=true last visited March 10, 2010, http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176154526495&pf=true last visited March 10, 2010.

[122] http://www.fasb.org/intl/convergence_iasb.shtml, last visited March 10, 2010.

A. <u>BOOK VALUE</u>

5. "The term *book value* is one of several widely used expressions in which the word value appears with a particular qualifying adjective to denote a particular concept of value. Book value is to be distinguished from such terms as fair or market value or liquidating value, in that it refers to amounts reflected on accounting records and in financial statements."[123]

6. In reference to individual items in books of accounts or in financial statements, the term *book value* "signifies the amount at which an item is stated in accordance with the accounting principles related to the item."[124] The United States Securities and Exchange Commission ("SEC") uses the term *book value* to denote the "book value of the securities as carried by the registrant."[125] Such interpretation of the term *book value* is in line with the implicit meaning of *book value* as used by the IASB.[126] The IASB made a distinction between "pre-combination book values" and "fair values at the date of the combination."[127] The IASB recognizes that there is a difference between the pre-combination book value and the fair value an acquirer may assign in a transaction.

B. <u>FAIR VALUE</u>

7. This section presents an overview relevant accounting principles for measuring fair value. Appendix IV discusses fair value hierarchy and related fair value measurement considerations.

8. IAS 39 *Financial Instruments: Recognition and Measurement,* (IAS 39) was originally issued in March 1999. In December 2003 IASB issued a revised IAS 39 which "applied for annual periods beginning on or after 1 January 2005."[128] The discussion below focuses on the revised IAS 39, including amendments up to December 2008.

---

[123] Accounting Terminology Bulletin 3, *Book Value* (ATB 3), ¶1.
[124] Accounting Terminology Bulletin 3, *Book Value* (ATB 3), ¶5.
[125] SEC Regulation S-X, *Financial Statement Requirements*, SEC RegS-X.T.Rule3-16.
Also see SEC RegS-X.I.Rule3-05.Determining Significance – Asset Test [5].
Also see SEC Regulation S-K, *Non Financial Statement Requirements*, RegS-K.T.Item914.
[126] *See* IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*, ¶IE8, Note (3).
[127] IFRS 3, ¶BC51: "…[b]ecause the assets and liabilities of all the combining entities would be recognised at their pre-combination book values rather than at their fair values at the date of the combination, users of the combined entity's financial statements would be unable to assess reasonably the nature, timing and extent of future cash flows expected to arise from the combined entity as a result of a combination..."
[128] IAS 39, ¶IN1.

9. IAS 39 establishes "principles for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items."[129] IAS 39 requires that "[w]hen a financial asset or financial liability is recognised initially, an entity shall measure it at its fair value."[130]

10. IAS 39 defines fair value as "the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction."[131] IAS 39 uses the terms *bid-price, asking price,* and *current-offer price* but does not reference the term *exit price*.[132] U.S. GAAP explicitly references *exit price* – "the objective of a fair value measurement is to **determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price)**."[133] In an effort to align the interpretations of exit price in international accounting standards and U.S. GAAP:

> The [IASB] Board confirmed its plan to complete a standard-by-standard review of fair value measurements currently required or permitted in IFRSs to assess whether each standard's measurement basis was intended to be an exit price. For situations in which the measurement basis was not intended to be an exit price, the Board plans to assess whether it should develop additional measurement guidance.[134]

11. IAS 39 lists fair-value measurement considerations:

> The best evidence of fair value is quoted prices in an active market. If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual

---

[129] IAS 39, ¶1.
[130] IAS 39, ¶43.
[131] IAS 39, Definitions, ¶9 (footnote omitted)
[132] IAS 39, ¶AG70
[133] SFAS 157 *Fair Value Measurements,* ¶7 (emphasis added). For similar references to exit price, see SFAS 157 Summary, and SFAS 157 ¶16, 17, 30, A2, A8, A27, C13, C16, C21, C23, C26, C29, C52, C63, C84.
[134] IASB *Information for Observers* (IASB Board Meeting, London, December 11, 2007, in re: Project *Fair Value Measurement*, Subject Cover Note (*Agenda Paper 2A*), ¶4).

> market transactions, the entity uses that technique. The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument (ie without modification or repackaging) or based on any available observable market data.[135]

12. IAS 39 provides additional guidance about how to determine fair values using valuation techniques:

- The objective is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations.
- A valuation technique (a) incorporates all factors that market participants would consider in setting a price and (b) is consistent with accepted economic methodologies for pricing financial instruments.
- In applying valuation techniques, an entity uses estimates and assumptions that are consistent with available information about the estimates and assumptions that market participants would use in setting a price for the financial instrument.
- The best estimate of fair value at initial recognition of a financial instrument that is not quoted in an active market is the transaction price unless the fair value of the instrument is evidenced by other observable market transactions or is based on a valuation technique whose variables include only data from observable markets.[136]

C. <u>BUSINESS COMBINATIONS</u>

13. IFRS 3 *Business Combinations,* issued in March 2004, applied "to the accounting for business combinations for which the *agreement date* is on or after 31 March 2004."[137] "The objective of this IFRS [IFRS 3 *Business Combinations*] is to specify the financial

[135] IAS 39, ¶48A.
[136] IAS 39, ¶IN18.
[137] IFRS 3, ¶78.

reporting by an entity when it undertakes a *business combination*. In particular, it specifies that all business combinations should be accounted for by applying the purchase method. Therefore, the acquirer recognises the acquiree's identifiable assets, liabilities and *contingent liabilities* at their *fair values* at the *acquisition date,* and also recognises *goodwill*, which is subsequently tested for impairment rather than amortised." [138]

14. IFRS 3 *Business Combinations* requires:

- all business combinations within its scope to be accounted for by applying the purchase method.[139]
- an acquirer to measure the cost of a business combination as the aggregate of: the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree; plus any costs directly attributable to the combination.[140]
- **an acquirer to recognise separately, at the acquisition date**, the acquiree's identifiable assets, liabilities and contingent liabilities that satisfy the following recognition criteria at that date, regardless of whether they had been previously recognised in the acquiree's financial statements:

  (i) in the case of an asset other than an intangible asset, it is probable that any associated future economic benefits will flow to the acquirer, and its fair value can be measured reliably;

  (ii) in the case of a liability other than a contingent liability, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and its fair value can be measured reliably; and

  (iii) in the case of an intangible asset or a contingent liability, its fair value can be measured reliably.[141]

---

[138] IFRS 3, ¶1 (italics in the original)
[139] IFRS 3, ¶IN7(a). IAS 22, the predecessor to IFRS 3, "permitted business combinations to be accounted for using one of two methods: the pooling of interests method for combinations classified as unitings of interests and the purchase method for combinations classified as acquisitions." (IFRS 3, ¶IN9)
[140] IFRS 3, ¶IN7(c).
[141] IFRS 3, ¶IN7(d) (emphasis added).

- the identifiable assets, liabilities and contingent liabilities that satisfy the above recognition criteria **to be measured initially by the acquirer at their fair values at the acquisition date**, irrespective of the extent of any minority interest.[142]

- goodwill acquired in a business combination to be recognised by the acquirer as an asset from the acquisition date, initially measured as the excess of the cost of the business combination over the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities recognised in accordance with IFRS 3, ¶IN7(d).[143]

- the acquirer to reassess the identification and measurement of the acquiree's identifiable assets, liabilities and contingent liabilities and the measurement of the cost of the business combination if the acquirer's interest in the net fair value of the items recognised in accordance with IFRS 3, ¶IN7(d) exceeds the cost of the combination. Any excess remaining after that reassessment must be recognised by the acquirer immediately in profit or loss.[144]

1. Measurement Date

15. IFRS 3 *Business Combinations* requires the acquirer to "**measure the cost of a business combination as the aggregate of: (a) the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree; plus (b) any costs directly attributable to the business combination.**"[145]

2. Acquisition Date Fair Value

16. IFRS 3 states:

> **The acquirer shall measure the cost of a business combination as the aggregate of:**

[142] IFRS 3, ¶IN7(e) (emphasis added).
[143] IFRS 3, ¶IN7(f). *See* IFRS 3, ¶IN7(d) cited above.
[144] IFRS 3, ¶IN7(h). *See* IFRS 3, ¶IN7(d) cited above
[145] IFRS 3, ¶24 (bold-face type in the original). IFRS 3 states: "All the paragraphs have equal authority. Paragraphs in bold type state the main principles."

> **(a) the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree; plus**
> **(b) any costs directly attributable to the business combination.**[146]

17. Paragraph 27 elevates the published price of a quoted instrument as the best evidence of the instrument's fair value:

> **The published price at the date of exchange of a quoted equity instrument provides the best evidence of the instrument's fair value and shall be used, except in rare circumstances.** Other evidence and valuation methods shall be considered only in the rare circumstances when the acquirer can demonstrate that the published price at the date of exchange is an unreliable indicator of fair value, and that the other evidence and valuation methods provide a more reliable measure of the equity instrument's fair value. The published price at the date of exchange is an unreliable indicator only when it has been affected by the thinness of the market. If the published price at the date of exchange is an unreliable indicator or if a published price does not exist for equity instruments issued by the acquirer, the fair value of those instruments could, for example, be estimated by reference to their proportional interest in the fair value of the acquirer or by reference to the proportional interest in the fair value of the acquiree obtained, whichever is the more clearly evident. The fair value at the date of exchange of monetary assets given to equity holders of the acquiree as an alternative to equity instruments may also provide evidence of the total fair value given by the acquirer in exchange for control of the acquiree. In any event, all aspects of the combination, including significant factors influencing the negotiations, shall be considered. Further guidance on determining the fair value of equity instruments is set out in IAS 39 *Financial Instruments: Recognition and Measurement.*[147]

3. <u>Negative Goodwill (a.k.a. Bargain Purchase)</u>

18. According to IFRS, "Goodwill acquired in a business combination represents a payment made by the acquirer in anticipation of future economic benefits from assets that are not capable of being individually identified and separately recognised."[148]

19. Negative goodwill arises in business combinations when the net fair value of identifiable assets, liabilities and contingent liabilities acquired exceeds the purchase price (hence, *bargain purchases*) and yields a gain to the acquirer:

---

[146] IFRS 3, ¶24 (bold-face type in the original.) IFRS 3 states: "All the paragraphs have equal authority. Paragraphs in bold type state the main principles."
[147] IFRS 3, ¶27. (emphasis added)
[148] IFRS 3, ¶52.

If the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities recognised in accordance with paragraph 36 exceeds the cost of the business combination, the acquirer shall:
(a) reassess the identification and measurement of the acquiree's identifiable assets, liabilities and contingent liabilities and the measurement of the cost of the combination; and
(b) recognise immediately in profit or loss any excess remaining after that reassessment.[149]

[149] IFRS 3, ¶56. (bold-face type in the original)

Appendix IV

Fair Value Considerations

1. This Appendix presents an overview of relevant accounting principles for measuring fair value. This Appendix summarizes specific guidance provided by international accounting standards (such as IAS 39 *Financial Instruments: Recognition and Measurement*, ("IAS 39")) and generally accepted accounting principles (such as SFAS 157, *Fair Value Measurements* ("SFAS 157")).

2. IAS 39 ¶48A states:

> The best evidence of fair value is quoted prices in an active market. If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique. The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument (ie without modification or repackaging) or based on any available observable market data.[150]

3. IAS 39 ¶AG69 through ¶AG82 offer additional fair value measurement considerations:

- AG69: Underlying the definition of fair value is a presumption that an entity is a going concern without any intention or need to liquidate, to curtail materially the scale of its operations or to undertake a transaction on adverse

[150] IAS 39 ¶48A.

terms. **Fair value is not, therefore, the amount that an entity would receive or pay in a forced transaction, involuntary liquidation or distress sale. However, fair value reflects the credit quality of the instrument**.[151]

- AG70: **This Standard** [IAS 39] **uses the terms 'bid price' and 'asking price' (sometimes referred to as 'current offer price') in the context of quoted market prices, and the term 'the bid-ask spread' to include only transaction costs. Other adjustments to arrive at fair value (e.g. for counterparty credit risk) are not included in the term 'bid-ask spread'**.[152]

Active market: quoted price

- AG71: A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. **Fair value is defined in terms of a price agreed by a willing buyer and a willing seller in an arm's length transaction**. **The objective of determining fair value for a financial instrument that is traded in an active market is to arrive at the price at which a transaction would occur at the end of the reporting period in that instrument (i.e. without modifying or repackaging the instrument) in the most advantageous active market to which the entity has immediate access.** However, the entity adjusts the price in the more advantageous market to reflect any differences in counterparty credit risk between instruments traded in that market and the one being valued. The existence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure the financial asset or financial liability.[153]

- AG72: **The appropriate quoted market price for an asset held or liability to be issued is usually the current bid price and, for an asset to be acquired or liability held, the asking price. When an entity has assets and**

[151] IAS 39 ¶AG69 (emphasis added).
[152] IAS 39 ¶AG70 (emphasis added).
[153] IAS 39 ¶AG71 (emphasis added).

liabilities with offsetting market risks, it may use mid-market prices as a basis for establishing fair values for the offsetting risk positions and apply the bid or asking price to the net open position as appropriate. When current bid and asking prices are unavailable, the price of the most recent transaction provides evidence of the current fair value as long as there has not been a significant change in economic circumstances since the time of the transaction. If conditions have changed since the time of the transaction (e.g. a change in the risk-free interest rate following the most recent price quote for a corporate bond), the fair value reflects the change in conditions by reference to current prices or rates for similar financial instruments, as appropriate. Similarly, if the entity can demonstrate that the last transaction price is not fair value (e.g. because it reflected the amount that an entity would receive or pay in a forced transaction, involuntary liquidation or distress sale), that price is adjusted. **The fair value of a portfolio of financial instruments is the product of the number of units of the instrument and its quoted market price. If a published price quotation in an active market does not exist for a financial instrument in its entirety, but active markets exist for its component parts, fair value is determined on the basis of the relevant market prices for the component parts.**[154]

<u>No active market: valuation technique</u>

- AG73: **If a rate (rather than a price) is quoted in an active market, the entity uses that market-quoted rate as an input into a valuation technique to determine fair value. If the market-quoted rate does not include credit risk or other factors that market participants would include in valuing the instrument, the entity adjusts for those factors**.[155]

- AG74: **If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. Valuation techniques include using recent arm's length market transactions**

[154] IAS 39 ¶AG72 (emphasis added).
[155] IAS 39 ¶AG73 (emphasis added).

between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models.

If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.[156]

- AG75: The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. **Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. A valuation technique would be expected to arrive at a realistic estimate of the fair value if (a) it reasonably reflects how the market could be expected to price the instrument and (b) the inputs to the valuation technique reasonably represent market expectations and measures of the risk-return factors inherent in the financial instrument.**[157]

- AG76: Therefore, a valuation technique (a) incorporates all factors that market participants would consider in setting a price and (b) is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument (i.e. without modification or repackaging) or based on any available observable market data. An entity obtains market data consistently in the same market where the instrument was originated or purchased. The best evidence of the fair value of a financial instrument at initial recognition is the transaction price (i.e. the fair value of the consideration given or received)

[156] IAS 39 ¶AG74 (emphasis added).
[157] IAS 39 ¶AG75 (emphasis added).

unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument (i.e. without modification or repackaging) or based on a valuation technique whose variables include only data from observable markets.[158]

- AG76A: The subsequent measurement of the financial asset or financial liability and the subsequent recognition of gains and losses shall be consistent with the requirements of this Standard. The application of paragraph AG76 may result in no gain or loss being recognised on the initial recognition of a financial asset or financial liability. In such a case, IAS 39 requires that a gain or loss shall be recognised after initial recognition only to the extent that it arises from a change in a factor (including time) that market participants would consider in setting a price.[159]

- AG77: The initial acquisition or origination of a financial asset or incurrence of a financial liability is a market transaction that provides a foundation for estimating the fair value of the financial instrument. In particular, if the financial instrument is a debt instrument (such as a loan), its fair value can be determined by reference to the market conditions that existed at its acquisition or origination date and current market conditions or interest rates currently charged by the entity or by others for similar debt instruments (ie similar remaining maturity, cash flow pattern, currency, credit risk, collateral and interest basis). Alternatively, provided there is no change in the credit risk of the debtor and applicable credit spreads after the origination of the debt instrument, an estimate of the current market interest rate may be derived by using a benchmark interest rate reflecting a better credit quality than the underlying debt instrument, holding the credit spread constant, and adjusting for the change in the benchmark interest rate from the origination date. If conditions have changed since the most recent market transaction, the corresponding change in the fair value of the financial instrument being valued is determined by reference to current prices or rates for similar

[158] IAS 39 ¶AG76.
[159] IAS 39 ¶AG76A.

financial instruments, adjusted as appropriate, for any differences from the instrument being valued.[160]

- AG78: The same information may not be available at each measurement date. For example, at the date that an entity makes a loan or acquires a debt instrument that is not actively traded, the entity has a transaction price that is also a market price. However, no new transaction information may be available at the next measurement date and, although the entity can determine the general level of market interest rates, it may not know what level of credit or other risk market participants would consider in pricing the instrument on that date. An entity may not have information from recent transactions to determine the appropriate credit spread over the basic interest rate to use in determining a discount rate for a present value computation. It would be reasonable to assume, in the absence of evidence to the contrary, that no changes have taken place in the spread that existed at the date the loan was made. However, the entity would be expected to make reasonable efforts to determine whether there is evidence that there has been a change in such factors. When evidence of a change exists, the entity would consider the effects of the change in determining the fair value of the financial instrument.[161]

- AG79: In applying discounted cash flow analysis, an entity uses one or more discount rates equal to the prevailing rates of return for financial instruments having substantially the same terms and characteristics, including the credit quality of the instrument, the remaining term over which the contractual interest rate is fixed, the remaining term to repayment of the principal and the currency in which payments are to be made. Short-term receivables and payables with no stated interest rate may be measured at the original invoice amount if the effect of discounting is immaterial.[162]

[160] IAS 39 ¶AG77.
[161] IAS 39 ¶AG78.
[162] IAS 39 ¶AG80.

No active market: equity instruments

- AG80: The fair value of investments in equity instruments that do not have a quoted market price in an active market and derivatives that are linked to and must be settled by delivery of such an unquoted equity instrument (see IAS 39 paragraphs 46(c) and 47) is reliably measurable if (a) the variability in the range of reasonable fair value estimates is not significant for that instrument or (b) the probabilities of the various estimates within the range can be reasonably assessed and used in estimating fair value.[163]

- AG81: There are many situations in which the variability in the range of reasonable fair value estimates of investments in equity instruments that do not have a quoted market price and derivatives that are linked to and must be settled by delivery of such an unquoted equity instrument (see paragraphs 46(c) and 47) is likely not to be significant. Normally it is possible to estimate the fair value of a financial asset that an entity has acquired from an outside party. However, if the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed, an entity is precluded from measuring the instrument at fair value.[164]

Inputs to valuation techniques

- AG82: An appropriate technique for estimating the fair value of a particular financial instrument would incorporate observable market data about the market conditions and other factors that are likely to affect the instrument's fair value. The fair value of a financial instrument will be based on one or more of the following factors (and perhaps others). [165]

  (a) *The time value of money (ie interest at the basic or risk-free rate)*. Basic interest rates can usually be derived from observable government bond prices and are often quoted in financial publications. These rates typically vary with the expected dates of the projected cash flows

[163] IAS 39 ¶AG80.
[164] IAS 39 ¶AG81.
[165] IAS 39 ¶AG82.

along a yield curve of interest rates for different time horizons. For practical reasons, an entity may use a well-accepted and readily observable general rate, such as LIBOR or a swap rate, as the benchmark rate. (Because a rate such as LIBOR is not the risk-free interest rate, the credit risk adjustment appropriate to the particular financial instrument is determined on the basis of its credit risk in relation to the credit risk in this benchmark rate.) In some countries, the central government's bonds may carry a significant credit risk and may not provide a stable benchmark basic interest rate for instruments denominated in that currency. Some entities in these countries may have a better credit standing and a lower borrowing rate than the central government. In such a case, basic interest rates may be more appropriately determined by reference to interest rates for the highest rated corporate bonds issued in the currency of that jurisdiction.

(b) *Credit risk*. The effect on fair value of credit risk (ie the premium over the basic interest rate for credit risk) may be derived from observable market prices for traded instruments of different credit quality or from observable interest rates charged by lenders for loans of various credit ratings.

(c) *Foreign currency exchange prices*. Active currency exchange markets exist for most major currencies, and prices are quoted daily in financial publications.

(d) *Commodity prices*. There are observable market prices for many commodities.

(e) *Equity prices*. Prices (and indexes of prices) of traded equity instruments are readily observable in some markets. Present value based techniques may be used to estimate the current market price of equity instruments for which there are no observable prices.

(f) *Volatility (ie magnitude of future changes in price of the financial instrument or other item)*. Measures of the volatility of actively traded

items can normally be reasonably estimated on the basis of historical market data or by using volatilities implied in current market prices.

(g) *Prepayment risk and surrender risk*. Expected prepayment patterns for financial assets and expected surrender patterns for financial liabilities can be estimated on the basis of historical data. (The fair value of a financial liability that can be surrendered by the counterparty cannot be less than the present value of the surrender amount—see IAS 39 paragraph 49.)

(h) *Servicing costs for a financial asset or a financial liability*. Costs of servicing can be estimated using comparisons with current fees charged by other market participants. If the costs of servicing a financial asset or financial liability are significant and other market participants would face comparable costs, the issuer would consider them in determining the fair value of that financial asset or financial liability. It is likely that the fair value at inception of a contractual right to future fees equals the origination costs paid for them, unless future fees and related costs are out of line with market comparables

4. SFAS 157 defines and discusses the Fair Value Hierarchy as follows:

Fair Value Hierarchy

- 22. To increase consistency and comparability in fair value measurements and related disclosures, the fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. The level in the fair value hierarchy within which the fair value measurement in its entirety falls shall be determined based on the lowest level input that is significant to

the fair value measurement in its entirety. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, considering factors specific to the asset or liability.[166]

- 23. The availability of inputs relevant to the asset or liability and the relative reliability of the inputs might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritizes the inputs to valuation techniques, not the valuation techniques. For example, a fair value measurement using a present value technique might fall within Level 2 or Level 3, depending on the inputs that are significant to the measurement in its entirety and the level in the fair value hierarchy within which those inputs fall.[167]

Level 1 inputs

- 24. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. **A quoted price in an active market provides the most reliable evidence of fair value and shall be used to measure fair value whenever available,** except as discussed in SFAS 157 paragraphs 25 and 26.[168]
- 25. If the reporting entity holds a large number of similar assets or liabilities (for example, debt securities) that are required to be measured at fair value, a quoted price in an active market might be available but not readily accessible for each of those assets or liabilities individually. In that case, fair value may be measured using an alternative pricing method that does not rely exclusively on quoted prices (for example, matrix pricing) as a practical expedient.

[166] SFAS 157 ¶22.
[167] SFAS 157 ¶23.
[168] SFAS 157 ¶24 (emphasis added).

However, the use of an alternative pricing method renders the fair value measurement a lower level measurement.[169]

- 26. In some situations, a quoted price in an active market might not represent fair value at the measurement date. That might be the case if, for example, significant events (principal-to-principal transactions, brokered trades, or announcements) occur after the close of a market but before the measurement date. The reporting entity should establish and consistently apply a policy for identifying those events that might affect fair value measurements. However, if the quoted price is adjusted for new information, the adjustment renders the fair value measurement a lower level measurement.[170]
- 27. **If the reporting entity holds a position in a single financial instrument (including a block) and the instrument is traded in an active market, the fair value of the position shall be measured within Level 1 as the product of the quoted price for the individual instrument times the quantity held. The quoted price shall not be adjusted because of the size of the position relative to trading volume (blockage factor). The use of a blockage factor is prohibited, even if a market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.**[171]

<u>Level 2 inputs</u>

- 28. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following:[172]

  a. Quoted prices for similar assets or liabilities in active markets

[169] SFAS 157 ¶25.
[170] SFAS 157 ¶26.
[171] SFAS 157 ¶27 (emphasis added, footnote omitted).
[172] SFAS 157 ¶28.

b. Quoted prices for identical or similar assets or liabilities in markets that are not active, that is, markets in which there are few transactions for the asset or liability, the prices are not current, or price quotations vary substantially either over time or among market makers (for example, some brokered markets), or in which little information is released publicly (for example, a principal-to-principal market)

c. Inputs other than quoted prices that are observable for the asset or liability (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, and default rates)

d. Inputs that are derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).

- 29. Adjustments to Level 2 inputs will vary depending on factors specific to the asset or liability. Those factors include the condition and/or location of the asset or liability, the extent to which the inputs relate to items that are comparable to the asset or liability, and the volume and level of activity in the markets within which the inputs are observed. **An adjustment that is significant to the fair value measurement in its entirety might render the measurement a Level 3 measurement, depending on the level in the fair value hierarchy within which the inputs used to determine the adjustment fall.**[173]

<u>Level 3 inputs</u>

- 30. Level 3 inputs are unobservable inputs for the asset or liability. **Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the**

[173] SFAS 157 ¶29 (emphasis added).

measurement date. However, the fair value measurement objective remains the same, that is, an exit price from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). Unobservable inputs shall be developed based on the best information available in the circumstances, which might include the reporting entity's own data. In developing unobservable inputs, the reporting entity need not undertake all possible efforts to obtain information about market participant assumptions. However, the reporting entity shall not ignore information about market participant assumptions that is reasonably available without undue cost and effort. Therefore, the reporting entity's own data used to develop unobservable inputs shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.[174]

Inputs based on bid and ask prices

- 31. **If an input used to measure fair value is based on bid and ask prices (for example, in a dealer market), the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value, regardless of where in the fair value hierarchy the input falls** (Level 1, 2, or 3). **This Statement does not preclude the use of midmarket pricing or other pricing conventions as a practical expedient for fair value measurements within a bid-ask spread.**[175]

[174] SFAS 157 ¶30 (emphasis added).
[175] SFAS 157 ¶31 (emphasis added).

Appendix V

Overview of the Audit Process

1. "To minimize the risk of materially misstated financial statements, users demand that an unbiased auditor monitor (an independent auditor) report on whether the assertions embodied within management's financial statements are reliable."[176] "Financial statements are audited by independent auditors, but the statements are the representations and responsibility of management, not the auditor. An independent auditor is responsible for expressing an opinion on management's financial statements, but management is responsible for the assertions embodied within the financial statements. For example, management, not the auditor, is responsible that all recorded assets and liabilities exist, that all recorded transactions occurred, that no transactions are omitted, that assets are the rights and liabilities are the obligations of the entity, that all disclosed amounts are appropriate, and that the financial statements are properly classified and disclosed."[177]

2. "If an 'absolute' basis were necessary to form an [audit] opinion, then auditors would have to examine entire populations rather than samples, thereby rendering financial statement audits far too costly. Furthermore, audit risk cannot be totally eliminated by 100 percent testing, because audit risks not related to sampling, such as human error, would still exist." [178]

3. "There is neither sufficient time nor, given the laws of probability, sufficient reason to test all of the transactions underlying an entity's account balances or classes of transactions. As a result, many if not most of the conclusions auditors reach about controls, balances and classes of transactions are based on testing samples rather than entire populations."[179]

[176] David N. Ricchiute, *Auditing*, 8th edition (United States: Thomson / South-Western, 2006 (ISBN: 0-324-22629-2)), 6.
[177] David N. Ricchiute, *Auditing*, 8th edition (United States: Thomson / South-Western, 2006 (ISBN: 0-324-22629-2)), 6.
[178] David N. Ricchiute, *Auditing*, 8th edition (United States: Thomson / South-Western, 2006 (ISBN: 0-324-22629-2)), 357.
[179] David N. Ricchiute, *Auditing*, 8th edition (United States: Thomson / South-Western, 2006 (ISBN: 0-324-22629-2)), 355.

Appendix VI

Auditing Fair Value Measurements and Disclosures

1. PwC conducted its audits of Barclays in accordance with the standards of the Public Accounting Oversight Board (United States).[180]

2. The Public Accounting Oversight Board codified Statement on Auditing Standards ("SAS") 101, *Auditing Fair Value Measurements and Disclosures*, into Auditing Section 328 (AU 328), *Auditing Fair Value Measurements and Disclosures.* AU 328 establishes standards and provides guidance on auditing fair value measurements and disclosures contained in financial statements:

- 2. The auditor should obtain sufficient competent audit evidence to provide reasonable assurance that fair value measurements and disclosures are in conformity with GAAP. GAAP requires that certain items be measured at fair value.[181]

- 4. Management is responsible for making the fair value measurements and disclosures included in the financial statements. As part of fulfilling its responsibility, management needs to establish an accounting and financial reporting process for determining the fair value measurements and disclosures, select appropriate valuation methods, identify and adequately support any significant assumptions used, prepare the valuation, and ensure that the presentation and disclosure of the fair value measurements are in accordance with GAAP.[182]

- 8. The measurement of fair value may be relatively simple for certain assets or liabilities, for example, investments that are bought and sold in active markets that provide readily available and reliable information on the prices at

---

[180] Report of the Independent Registered Public Accounting Firm (PriceWaterhouseCoopers LLP – Chartered Accountants and Registered Auditors) to the Board of Directors and Shareholders of Barclays PLC (Barclays PLC and Barclays Bank PLC Form 20-F for the fiscal year ended December 31, 2008, page 177).

[181] AU Section 328, ¶2.

[182] AU Section 328, ¶4.

which actual exchanges occur. For those items, the existence of published price quotations in an active market is the best evidence of fair value. The measurement of fair value for other assets or liabilities may be more complex. A specific asset may not have an observable market price or may possess such characteristics that it becomes necessary for management to estimate its fair value based on the best information available in the circumstances (for example, a complex derivative financial instrument). The estimation of fair value may be achieved through the use of a valuation method (for example, a model premised on discounting of estimated future cash flows).[183]

- 8.– 9. The auditor should obtain an understanding of the entity's process for determining fair value measurements and disclosures and of the relevant controls sufficient to develop an effective audit approach.[184] When obtaining an understanding of the entity's process for determining fair value measurements and disclosures, the auditor considers, for example:[185]
  - Controls over the process used to determine fair value measurements, including, for example, controls over data and the segregation of duties between those committing the entity to the underlying transactions and those responsible for undertaking the valuations.
  - The expertise and experience of those persons determining the fair value measurements.
  - The role that information technology has in the process.
  - The types of accounts or transactions requiring fair value measurements or disclosures (for example, whether the accounts arise from the recording of routine and recurring transactions or whether they arise from nonroutine or unusual transactions).
  - The extent to which the entity engages or employs specialists in determining fair value measurements and disclosures.

[183] AU Section 328, ¶8.
[184] AU Section 328, ¶9.
[185] AU Section 328, ¶12.

- The significant management assumptions used in determining fair value.
- The documentation supporting management's assumptions.
- The process used to develop and apply management assumptions, including whether management used available market information to develop the assumptions.
- The process used to monitor changes in management's assumptions.
- The integrity of change controls and security procedures for valuation models and relevant information systems, including approval processes.
- The controls over the consistency, timeliness, and reliability of the data used in valuation models.

- 13. The auditor uses his or her understanding of the entity's process, including its complexity, and of the controls when assessing the risk of material misstatement. Based on that risk assessment, the auditor determines the nature, timing, and extent of the audit procedures. The risk of material misstatement may increase as the accounting and financial reporting requirements for fair value measurements become more complex.[186]

- 18. When there are no observable market prices and the entity estimates fair value using a valuation method, the auditor should evaluate whether the entity's method of measurement is appropriate in the circumstances. That evaluation requires the use of professional judgment. It also involves obtaining an understanding of management's rationale for selecting a particular method by discussing with management its reasons for selecting the valuation method. The auditor considers whether:[187]

    a.) Management has sufficiently evaluated and appropriately applied the criteria, if any, provided by GAAP to support the selected method.

[186] AU Section 328, ¶13.
[187] AU Section 328, ¶18.

b.) The valuation method is appropriate in the circumstances given the nature of the item being valued.

c.) The valuation method is appropriate in relation to the business, industry, and environment in which the entity operates.

- 23. Based on the auditor's assessment of the risk of material misstatement, the auditor should test the entity's fair value measurements and disclosures. Because of the wide range of possible fair value measurements, from relatively simple to complex, and the varying levels of risk of material misstatement associated with the process for determining fair values, the auditor's planned audit procedures can vary significantly in nature, timing, and extent.[188]

- 24. Some fair value measurements are inherently more complex than others. This complexity arises either because of the nature of the item being measured at fair value or because of the valuation method used to determine fair value. For example, in the absence of quoted prices in an active market, an estimate of a security's fair value may be based on valuation methods such as the discounted cash flow method or the transactions method. Complex fair value measurements normally are characterized by greater uncertainty regarding the reliability of the measurement process. This greater uncertainty may be a result of: [189]

  - The length of the forecast period
  - The number of significant and complex assumptions associated with the process
  - A higher degree of subjectivity associated with the assumptions and factors used in the process
  - A higher degree of uncertainty associated with the future occurrence or outcome of events underlying the assumptions used

[188] AU Section 328, ¶23.
[189] AU Section 328, ¶24.

  - Lack of objective data when highly subjective factors are used

- 25. The auditor uses both the understanding of management's process for determining fair value measurements and his or her assessment of the risk of material misstatement to determine the nature, timing, and extent of the audit procedures. The following are examples of considerations in the development of audit procedures:[190]

  - The fair value measurement (for example, a valuation by an independent appraiser) may be made at a date that does not coincide with the date at which the entity is required to measure and report that information in its financial statements. In such cases, the auditor obtains evidence that management has taken into account the effect of events, transactions, and changes in circumstances occurring between the date of the fair value measurement and the reporting date.

  - Collateral often is assigned for certain types of investments in debt instruments that either are required to be measured at fair value or are evaluated for possible impairment. If the collateral is an important factor in measuring the fair value of the investment or evaluating its carrying amount, the auditor obtains sufficient competent audit evidence regarding the existence, value, rights, and access to or transferability of such collateral, including consideration of whether all appropriate liens have been filed, and considers whether appropriate disclosures about the collateral have been made.

  - In some situations, additional procedures, such as the inspection of an asset by the auditor, may be necessary to obtain sufficient competent audit evidence about the appropriateness of a fair value measurement. For example, inspection of the asset may be necessary to obtain information about the current physical condition of the asset relevant to its fair value, or inspection of a security may reveal a restriction on its marketability that may affect its value.

[190] AU Section 328, ¶25.

- 26. The auditor's understanding of the reliability of the process used by management to determine fair value is an important element in support of the resulting amounts and therefore affects the nature, timing, and extent of audit procedures. When testing the entity's fair value measurements and disclosures, the auditor evaluates whether:[191]

  a.) Management's assumptions are reasonable and reflect, or are not inconsistent with, market information.

  b.) The fair value measurement was determined using an appropriate model, if applicable.

  c.) Management used relevant information that was reasonably available at the time.

- 32. Audit procedures dealing with management's assumptions are performed in the context of the audit of the entity's financial statements. The objective of the audit procedures is therefore not intended to obtain sufficient competent audit evidence to provide an opinion on the assumptions themselves. Rather, the auditor performs procedures to evaluate whether the assumptions provide a reasonable basis for measuring fair values in the context of an audit of the financial statements taken as a whole.[192]

- 34. The auditor considers the sensitivity of the valuation to changes in significant assumptions, including market conditions that may affect the value. Where applicable, the auditor encourages management to use techniques such as sensitivity analysis to help identify particularly sensitive assumptions. If management has not identified particularly sensitive assumptions, the auditor considers whether to employ techniques to identify those assumptions.[193]

- 36. To be reasonable, the assumptions on which the fair value measurements are based (for example, the discount rate used in calculating the present value

[191] AU Section 328, ¶26.
[192] AU Section 328, ¶32.
[193] AU Section 328, ¶34.

of future cash flows), individually and taken as a whole, need to be realistic and consistent with:[194]

a.) The general economic environment, the economic environment of the specific industry, and the entity's economic circumstances;

b.) Existing market information;

c.) The plans of the entity, including what management expects will be the outcome of specific objectives and strategies;

d.) Assumptions made in prior periods, if appropriate;

e.) Past experience of, or previous conditions experienced by, the entity to the extent currently applicable;

f.) Other matters relating to the financial statements, for example, assumptions used by management in accounting estimates for financial statement accounts other than those relating to fair value measurements and disclosures; and

g.) The risk associated with cash flows, if applicable, including the potential variability in the amount and timing of the cash flows and the related effect on the discount rate.

- 39. The auditor should test the data used to develop the fair value measurements and disclosures and evaluate whether the fair value measurements have been properly determined from such data and management's assumptions. Specifically, the auditor evaluates whether the data on which the fair value measurements are based, including the data used in the work of a specialist, is accurate, complete, and relevant; and whether fair value measurements have been properly determined using such data and management's assumptions. The auditor's tests also may include, for example, procedures such as verifying the source of the data, mathematical recomputation of inputs, and reviewing of information for internal consistency, including whether such information is consistent with

[194] AU Section 328, ¶36.

management's intent and ability to carry out specific courses of action discussed in paragraph 17.[195]

- 40. The auditor may make an independent estimate of fair value (for example, by using an auditor developed model) to corroborate the entity's fair value measurement. When developing an independent estimate using management's assumptions, the auditor evaluates those assumptions as discussed in paragraphs 28 to 37. Instead of using management's assumptions, the auditor may develop his or her own assumptions to make a comparison with management's fair value measurements. In that situation, the auditor nevertheless understands management's assumptions. The auditor uses that understanding to ensure that his or her independent estimate takes into consideration all significant variables and to evaluate any significant difference from management's estimate. The auditor also should test the data used to develop the fair value measurements and disclosures as discussed in paragraph 39.[196]

[195] AU Section 328, ¶39.
[196] AU Section 328, ¶40.